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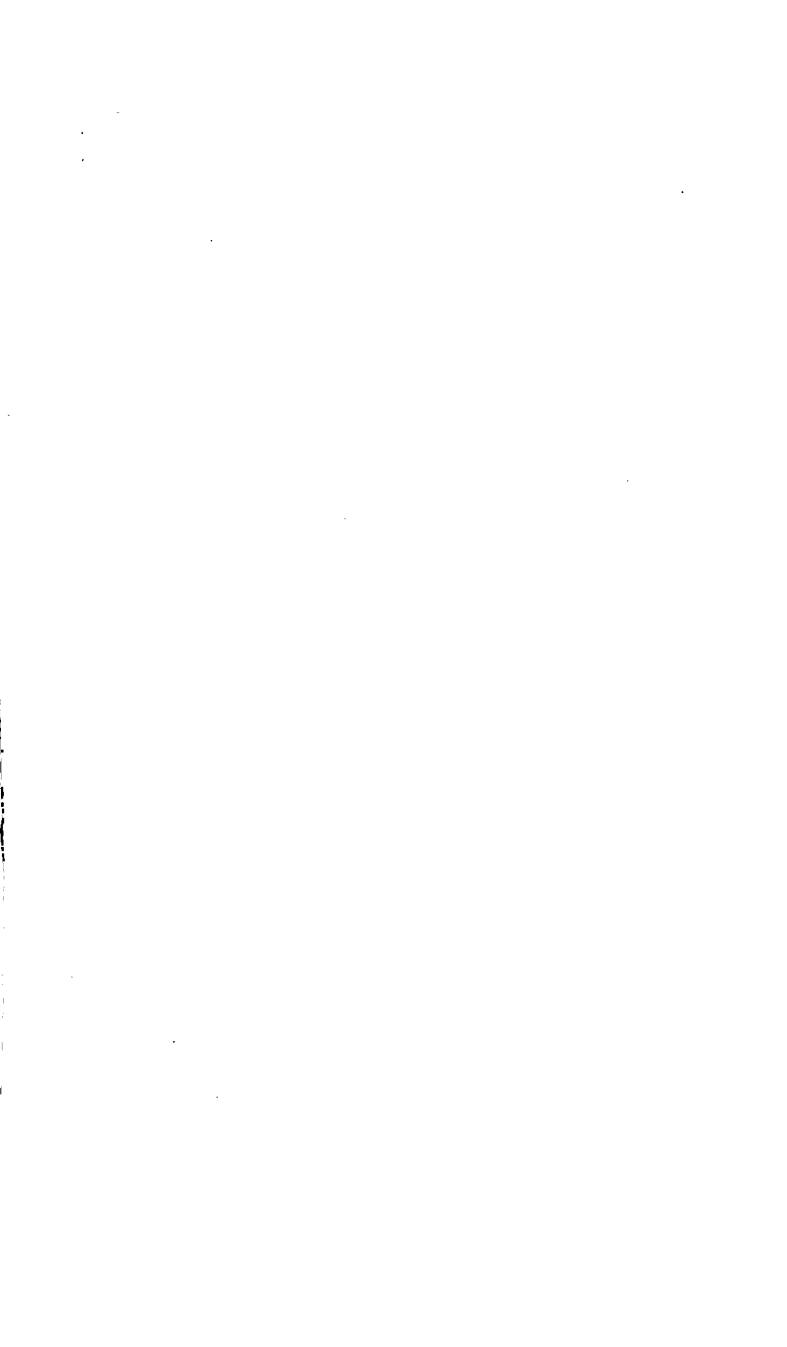
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HARVARD
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LIST
OF THE
SPECIMENS
OF
LEPIDOPTEROUS INSECTS
IN
THE COLLECTION
OF THE
BRITISH MUSEUM.

PART I.—LEPIDOPTERA HETEROCERA.

PRINTED BY ORDER OF THE TRUSTEES.
LONDON, 1854.

~~Z 57.8 B2 (17)~~

KD 58178 (I, 1)



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INTRODUCTION.

THE principal object of the present Catalogue has been to give a complete list of the specimens of Lepidopterous Insects contained in the collection of the British Museum, indicating at the same time the peculiarities of each, as regards variation of character, locality, and the source from whence it has been derived. With this view, the different individuals of each species contained in the collection are indicated by the letters *a, b, c, &c.*, following the name of the species and its synonyms, and the description, if it appeared to have been before undescribed.

This part of the Catalogue of Lepidopterous Insects has been prepared and the new species described by Mr. FRANCIS WALKER, so well known for his attention to this order of Insects.

The continuation is in hand, and will follow as soon as it is completed.

JOHN EDWARD GRAY.

British Museum,

January 28th, 1854.

1864, Dec. 31.

Gift of
the British Museum.

CATALOGUE

OF

LEPIDOPTERA HETEROCERA.

Div. I. RHOPALOCERA.

Antennæ plus minusve ad apicem clavatæ. Alæ omnes insecti quiescentis erectæ, liberæ, retinaculo nullo. Ocelli nulli. Volatus diurnus.

Rhopalocera, *Boisd. et Lec. Icon. Lep.* 162 ; *Steph.*

Papilio, *Linn.*

Papilio et Hesperia, *Fabr.*

Papiliones, *Hübner.*

Lep. Diurna, Papilionides et Hesperides, p., *Latr. Gen.* iv. 186.

Ropalocera, *Dum. Cons. Gén.* 222.

Achalinoptera, p. (Papilionii, Nymphalii, Erycinii, et Hesperii), *Blanchard, Hist. Nat. Ins.* ii. 322 ; *Chenu, Enc. d'Hist. Nat. Pap.* 31.

Div. II. HETEROCERA.

Antennæ variabiles ; prismaticæ, pectinatæ, serratæ, moniliformes, vel filiformes. Alæ nunquam per quietem erectæ ; posticæ sæpius frenatæ. Ocelli in plerisque. Volatus modo diurnus, modo crepuscularis, sæpius nocturnus.

Heterocera, *Boisd. et Lec. Icon. Lep.* i. 39.

Achalinoptera, p. (Cydimonii), et Chalinoptera, *Blanchard, Hist. Nat. Ins.* ii. 322 ; *Chenu, Enc. d'Hist. Nat. Pap.* 232.

Sphinx et Phalæna, *Linn.*

Lep. Crepuscularia et Nocturna, *Latr. Gen.* iv. ; *Duponchel.*

Closterocera, Nematocera et Chetocera, *Duméril.*

Trib. 1. SPHINGII.

Larvæ subdiales, nudæ, antice plus minusve attenuatæ, sæpius cornu anali armatæ. Pupa cylindrico-conica, sæpissime nuda, rarius subfolliculata. Antennæ sublineares, prismaticæ, apice tenuiore piloso, maris subtus scobinæformes, fæminæ simpliciores. Palpi lati, obtusi, sæpius clypeo piloso arcu applicati. Alæ angustæ, deflexæ. Abdomen maximum, conicum.

Sphingides, *Boisd. Ind. Méth. Lep. Eur.* 45.

Sphinx, *Linn.*

Sphingidæ et Sesiidæ, *Leach ; Steph.*

Sphingides, p., *Latr. ; Duponch.*

Sphinges legitimæ, p., *Hüb.*

Lep. Crepuscularia, p., *Latr. Gen.* iv. 209.

Closterocera, p., *Duméril.*

Sphingii, *Latr. ; Blanch. Hist. Nat. Ins.* ii. 256 ; *Chenu, Enc. d'Hist. Nat. Pap.* 252.

Sphingidæ, p., *Swainson.*

Sphingiadæ et Macroglossiadæ, *Harris.*

The species of this, and of the following tribe, will be included in another catalogue.

Tribe 2. SESII.

Larvæ vermiformes, decoloratæ, scutellatæ, in medulla fruticum vel radicum occulte degentes. Pupa postice spinulosa. Frons rotundata, squamosa, ocellis duobus distinctis munita. Alæ plus minusve hyalinæ, posticæ frenatæ. Abdomen cylindrico-conicum. Tibiæ posticæ valde calcaratæ. Volatus diurnus.

Ægeriidæ, *Steph. Ill. Brit. Ent. Haust.* i. 136.

Sesiariæ, *Boisd. Ind. Méth. Lep. Eur.* 41 (1840).

Trochiliidæ, *Westw. Hum. Brit. Moths,* i. 32.

Sphinx, p., *Linn.*

Sesia, *Fabr. Ent. Syst.* iii. 379.

Sphinges Hymenopteroides Sesiæ, *Hüb. Verz. Schmett.* 127.

Sesii, *Duponchel ; Blanch. Hist. Nat. Ins.* ii. 251 ; *Chenu, Enc. d'Hist. Nat. Pap.* 236.

Zygænides, p., *Latr. ; Dalm.*

Sesides, *Duponchel.*

Orthidæ, *Swainson.*

Ægeriadæ, *Harris.*

Genus 1. THYRIS.

Palpi cylindrico-conici, ultra clypeum assurgentes, articulo ultimo acuminato, subnudo, apice submucronato. Antennæ graciles, fusiformes, in fœmina graciliores. Abdomen conicum. Tibiæ calcaratæ. Alæ horizontales, breves, denticulatæ, fimbria intersecta, hyalino-maculatæ.

Thyris, Illiger; Latr.; God.; Hoffm.; Ochs. Boisd. Mon. Zyg. 16; Blanchard; Crochard; Chenu.

Phalæna, p., Scopoli.

Sphinx, p., Fabr.; Hübn.; Borkh.; Wien. Verz.; Esper; Rossi, Sesia, p., Schrank.

Thyrides, Hübn. Verz. Schmett. 130.

Genus 2. TRYPANOPHORA.

Antennæ elongatæ, graciles, intus serratæ, apice compressæ dilatatæ. Palpi brevissimi, oculos vix attingentes, barbati. Lingua spiralis, longa, basi dilatata. Alæ amplæ ex parte nudæ, diaphanæ, vena cubitali biramosa, areolam oblongam, subovatam, clausam formante. Abdomen cylindricum terebra brevi exserta in fœmina instructum. Pedes æquales, subcompressi, graciles, tibiæ calcaribus brevissimis.

Trypanophora, Kollar, Kaschmir von Von Hugel, iv. 457.

Genus 3. ÆGERIA.

Antennæ sublineares, vel fusiformes, apice floccido, maris interdum dentatæ, vel bipectinatæ. Palpi squamati vel pilosi, ultra clypeum assurgentes, distincte triarticulati. Alæ angustissimæ, hyalinæ, vel fenestratæ, stigmatæ ultra medium locato. Pedes elongati.

Ægeria, Fabr. Syst. Gloss. Illig. Mag. iv.

Sesia, Fabr. Ent. Syst.; Laspeyres.; Ochs.; Latr., Dum.; God.; Boisd.; Duponchel; Crochard.

Trochilum, Scopoli.

Including several genera which have been separated from it.

Tribe 3. CYDIMONII.

Corpus mediocriter robustum. Antennæ parte basali filiformes, postea subincrassatæ, apice attenuatæ. Palpi articulo ultimo recto nudo. Alæ amplæ, posticæ strenue dentatæ, nonnunquam caudatæ.

Larva crassa, antice attenuata.

Cydimonii, *Blanchard, Hist. Nat. Ins.* ii. 348; *Chenu, Enc. d'Hist. Nat. Pap.* 229.

Papilio, p., *Linn.*; *Fabr.*; *Scop.*; *Gmel.*

Urania, *Fabr. Syst. Gloss.*

Hesperides, p., *Latr.*

Fam. Papilionidæ. Sub-fam. Papilionæ. Gen. Leilus, p., *Swainson*.

Uraniidæ, *Westw.*

The species of this family much resemble the Papilionidæ.

Genus 1. URANIA.

Corpus breve, sat validum. Palpi caput paullo superantes, compressi, sat graciles, articulo 3o cylindrico 2i longitudine; apice conico. Thorax rotundatus. Alæ anticæ margine externo valde obliquo. Alæ posticæ plerumque valde dentatæ, longe caudatæ.

Urania, *Fabr. Syst. Gloss. Illig. Mag.* iv.; *Latr.*; *God.*

Cydimon, *Dalm. Act. Holm.* 1824, 407; *Blanch. Hist. Nat. Ins.* ii. 349; *Chenu, Enc. d'Hist. Nat. Pap.* 230; *Crochard*.

Urania et Dasycephalus, *Swainson*.

Thaliura, Urania et Dasycephalus, *Duncan*.

1. URANIA LEILUS.

Alæ nigrae; anticæ utrinque strigis transversis fasciæque media bifida aureo-viridibus; posticæ fascia aureo-viridi caudisque longis albis.

Papilio Leilus, *Linn. Syst. Nat.* ii. 750, 31; *Mus. Lud. Utr.* 206. *Gron. Zooph.* 724. *Clerck, Icon.* pl. 27, f. 1. *Scop. Ann. Hist. Nat.* v. 110, 111. *Fabr. Sp. Ins.* ii. 12, 48; *Mant. Ins.* ii. 7, 54; *Ent. Syst.* iii. 21, 63. *Merian, Ins. Surin.* pl. 29. *Seba, Mus.* iv. pl. 36, f. 1—4. *Klem. Ins.* i. pl. 2, f. 1. *Knorr, Delic.* pl. C. f. 1. *Cram. Pap. Exot.* i. 133, pl. 85, f. C. D.

D'Aubent. Misc. i. pl. 71, f. 1. *Gmel. ed. Syst. Nat.* i. 5, 2237, 31. *Herbst, Pap.* pl. 50, f. 2. 3. *Esp. Pap. Exot.* pl. 53, f. 2.

Urania Leilus, *God. Enc. Méth.* ix. 709, 3. *Fabr. Syst. Gloss. Lam. Hist. Nat. Anim. Invert.* iv. 9, 1. *Duncan's Nat. Libr.* xxxvi. *Exot. But.* 205, pl. 29, f. 3.

Lars heroica *Leilaria*, *Hübner. Samml. Exot. Schmett.* i. *Lep.* v. 11. *Geometræ*, i. *Amplæ*, iv. *Lares B. Heroicæ*, a. f. 1, 2.

Urania Leilaria, *Hübner. Verz. Schmett. Lares Her. Urania*, 289, 28, 13.

Leilus Surinamensis, *Swainson, Zool. Illustr. 2nd Ser.* pl. 125.

Cayenne. Surinam.

a—d. South America. From Mr. Johnson's collection.

2. URANIA BRAZILIENSIS.

Alæ nigrae; anticae utrinque strigis transversis fasciaque media bifida aureo-viridibus; posticae fascia interrupta aureo-viridi caudisque longis nigris albo marginatis.

Leilus Braziliensis, *Swainson, New Zool. Illustr. 2nd Ser.* pl. 126.

a. Brazil. Presented by W. Swainson, Esq.

b—d. Brazil. From Mr. Argent's collection.

e. ——— ?

3. URANIA FULGENS.

Alæ nigrae; anticae strigis transversis basalibus fasciaque media aureo-viridibus; posticae fascia interrupta aureo-viridi, caudisque nigris albo marginatis.

Urania fulgens, *Boisd. MSS.*

a. Sta. Fé de Bogota. Presented by E. Doubleday, Esq.

b. Mexico. From Mr. Argent's collection.

4. URANIA BOISDUVALII.

Alæ nigrae; anticae utrinque strigis transversis fasciaque media bifida aureo-viridibus; posticae fascia integra et strigis marginalibus aureo-viridibus, caudis longis nigris albo vix marginatis.

Urania Boisduvalii, Guérin, *Icon. Règne Anim. Ins.* pl. 82, f. 1.
Texte, 490.

Cydimon Boisduvalii, Chenu, *Enc. d'Hist. Nat. Pap.* 230, f. 395.

Urania Fernandinæ, MacLeay, *Trans. Zool. Soc.* i. 180, pl. 26.

a, b. Cuba. From M. Parzudaki's collection.

5. URANIA SLOANUS.

Alæ nigrae; anticae utrinque strigis transversis fasciæque media bifida aureo-viridibus; posticae fascia aureo-cuprea, areola anali glauco-viridi, caudis longissimis viridi vittatis.

Urania Sloanus, God. *Enc. Méth.* ix. 709, 2. MacLeay, *Trans. Zool. Soc. Lond.* i. 180. Duncan, *Nat. Libr.* xxxvi. *Exot. But.* 202, pl. 29, f. 1.

———? Sloane, *Jamaic. Hist.* ii. 215, pl. 239, f. 11, 12.

Papilio Sloanus, Cram. *Pap. Exot.* i. 134, pl. 85, f. E. F. Oliv. *Enc. Méth. Ins. Pap.* pl. 8, f. 5.

Papilio Sloaneus, Herbst, *Pap.* pl. 51, f. 3, 4.

Papilio Leilus. Var. β . Gmel. *ed. Syst. Nat.* i. 5, 2237, 31. Fabr. *Ent. Syst.* iii. 122.

Urania Sloanaria, Hubn. *Verz. Schmett. Lares Heroicae Urania*, 289, 2812.

Leilus occidentalis, Swainson, *Zool. Illustr. 2nd Ser.* pl. 129.

a—f. Jamaica. From Mr. Gosse's collection.

6. URANIA RHIPHEUS.

Alæ nigrae; anticae utrinque lineolis transversis fasciæque media bifida aureo-viridibus; posticae area anali cuprea violaceo-micanti nigroque maculata. Long. alar. 57 lin.

———? Drury, *Ins. Exot.* ii. 40, pl. 23, f. 1, 2.

Papilio (Eq. Troj.) *Rhipheus*, Drury? *App.* ii. *Esper?* *Pap. Exot.* pl. 21, f. 1, 2. Cram. *Pap. Exot.* iv. 193, pl. 385, f. A. B. Gmel. *ed. Syst. Nat.* i. 5, 2235, 306. Fabr. *Ent. Syst.* iii. 1, f. 21, 62. Oliv. *Enc. Méth. Ins. Pap.* pl. 8, f. 4.

Urania Prometheus, Drapiez, *Dict. Class. d'Hist. Nat.* 3, pl. 8, f. 1, 2.

Rhipheus dasycephalus? Swainson, *Zool. Illustr. 2nd Ser.* pl. 131. Duncan, *Nat. Libr.* xxxvi. *Exot. But.* 205, pl. 30.

Urania Rhipheus, Lam. *Hist. Nat. Anim. Invert.* iv. 192. God. *Enc. Méth.* ix. 709, 1. Westw. *ed. Drury*, ii. 42, pl. 23, f. 1, 2.

Boisd. Ann. Soc. Ent. Fr. ii. 248. *Faun. Ent. Madagasc. Lép.* 112, pl. 14, f. 1, 2. *Crochard, ed. Règne Anim. Atlas. Ins.* pl. 144, f. 3.

Chrysidia Riphearia, *Hübner. Verz. Schmett. Lares Heroicæ Chrysidæ*, 289, 2811.

Leilus Orientalis, *Swainson, Zool. Illustr. 2nd Ser.* pl. 130.

China. Bengal. Coromandel. Madagascar.

a. Madagascar.

The original *Rhipheus* of Drury and Esper, or the *Rhipheus dasycephalus* of Swainson, is either one of the *Papilionidæ*, or an incorrect figure of the *Rhipheus* of Cramer, and of other authors.

Genus 2. NYCTALEMON.

Corpus sat longum. Palpi longi, caput multo superantes, articulo 1o longissimo gracili compresso. Alæ latiores; anticæ margine externo minus obliquo; posticæ vix caudatæ.

Nyctalemon, *Dalman, Act. Holm.* 1824, 407; *Westw.*; *Blanch. Hist. Nat. Ins.* ii. 349; *Chenu, Enc. d'Hist. Nat. Pap.* 230.

Papilio (*Equit. Achiv.*) p., *Linn.*

Noctua, p., *Fabr.*

Urania (*Div. C.*) *Latr.*; *God.*

Orontes (*Sub-gen.*), *Swainson, Zool. Illustr. 2nd Ser.* 125.

1. NYCTALEMON ORONTES.

Alæ nigrae, fasciis duabus virescentibus; posticæ caudis albis remotis.

Papilio Orontes, *Linn. Amæn. Acad.* vi. 402, 51; *Syst. Nat.* ii. 750, 27. *Clerck, Icon.* pl. 26, f. 1. *Fabr. Sp. Ins.* ii. 20, 80; *Mant. Ins.* ii. 10, 91; *Ent. Syst.* iii. 69, 214. *Seba, Mus.* iv. pl. 16, f. 1, 2, pl. 47, f. 7, 8. *Herbst, Pap.* pl. 47, f. 1, 2. *Esp. Pap. Exot.* pl. 30, f. 1, 2. *Cram. Pap. Exot.* i. pl. 83, f. A. B.

Nyctalemon Orontes, *Chenu, Enc. d'Hist. Nat. Pap.* 231, f. 396.

Urania Orontes, *Lam. Hist. Anim. Invert.* iv. 19, 3. *God. Enc. Méth.* ix. 710, 4. *Boisd. Voy. de l'Astrolabe*, Pt. 1, *Lep.* 253, 1. *Feisthamel, Voy. de la Favorite*, v. *Suppl.* 29.

Alcides Orontiarria, *Hübner. Samml. Exot. Schmett.* i. *Lep.* v. *Geom.* i. *Amplæ*, iv. *Lares B. Heroici*, 3, f. 3, 4; *Verz. Schmett.* 289, 2810.

a. New Holland. From Mr. Children's collection.

b, c. ——— ?

2. NYCTALEMON PATROCLUS.

Alæ supra fuscæ, subtus subcinereæ fusco undatæ, utrinque fascia communi media recta alba; posticæ caudatæ. Long. alar. fere 72 lin.

Nyctalemon Patroclus, *Westw. Drury*, 1, 13, pl. 7, f. 1; pl. 8, f. 1.

———— ? *Drury, Ins.* 14, 16, pl. 7, f. 1; pl. 8, f. 1.

Papilio (Eq. Achiv.) *Patroclus*, *Linn. Mus. Lud. Ulr.* 204; *Syst. Nat.* ii. 749, 24. *Clerck, Icon.* pl. 37, f. 1. *Fabr. Sp. Ins.* ii. 13, 53; *Mant. Ins.* ii. 7, 59; *Ent. Syst.* iii. 2. *Seba, Mus.* iv. pl. 47, f. 13, 16. *D'Aubent. Miscell.* pl. 17, f. 1, 2. *Oliv. Enc. Méth. Ins. Pap.* pl. 8, f. 1. *Cram. Pap. Exot.* iii. 9, pl. 198, f. A.; pl. 109, f. A. B. *Herbst, Pap.* pl. 54, f. 2, 3; pl. 55, f. 1. *Gmel. ed. Syst. Nat.* i. 5, 2236, 24.

Noctua Patroclus, *Fabr. Ent. Syst.* iii. 2, 8, 2.

Urania Patroclus, *Latr. et God. Enc. Méth.* ix. 710, 5. *Lam. Hist. Nat. Anim. Invert.* iv. 194. *Boisd. Voy. de l'Astrolabe*, Pt. 1, *Lép.* 254, 2.

Lyssa Achillaria et Patroclaria, *Hübner. Verz. Schmett.* 289. *Lares Heroicæ Larundæ Lyssæ*, 2808, 2809.

China. Amboyana.

a, b. Silhet. From the Rev. J. Stainforth's collection.

c. ——— ? From Mr. Children's collection.

The three following species belong to the genus *Sematura*, *Dalm. Act. Holm.* 1824, 407.

3. NYCTALEMON LUNUS.

Alæ fusco luteoque undatæ; posticæ caudatæ, ocellis caudalibus subternis.

Phalæna Lunus, *Linn. Syst. Nat.* ii. 810, 6; *Mus. Lud. Ulr.* 311.

Papilio Lunus, *Cram. Pap. Exot.* iii. 13, pl. 200, f. A—C. *Oliv. Enc. Méth. Ins. Pap.* pl. 8, f. 3. *Herbst, Pap.* pl. 53, f. 1—3.

Phalæna Attacus Lunus, *Clerck, Icon.* pl. 52, f. 3, 4.

Papilio Empedocles? *Cram. Pap. Exot.* iii. 11, pl. 199, f. A. B. *Herbst, Pap.* pl. 53, f. 4, 5. *Oliv. Enc. Méth. Ins. Pap.* pl. 8, f. 2.

Urania Empedocles? *Fabr. Mant. Ins.* ii. 10, 94. *God. Enc. Méth.* ix. 711, 7. *Gmel. ed. Syst. Nat.* i. 5, 2240, 326.

Lars heroica Empedoclaria, *Hüb. Samml. Exot. Schmett.* i. *I.ep.* v. *Geometrae*, i. *Amplæ*, iv. *Lares B. Heroici*, B. f. 314.

Mania Empedoclaria, *Hüb. Verz. Schmett.* 290, 2814. *Lares Heroicæ Mania*, 290, 2814.

Mania candilunaria et lunigeraria, *Hüb. Verz. Schmett.* 290, 2815, 2816.

Urania Lanus, *God. Enc. Méth.* ix. 74, 6.

a. Brazil. Presented by E. Doubleday, Esq.

b. Honduras. From Mr. Dyson's collection.

c. Brazil. From M. Becker's collection.

d. Brazil. From Mr. Stevens' collection.

e. Brazil. From Mr. Bates' collection.

f. ——— ?

4. NYCTALEMON ÆGISTUS?

Alæ caudatæ, fusco luteoque undulatæ, fasciæque pallidiore distinctiore latiore subundulatæ; posticæ ocellis caudalibus subternis.

Papilio Ægistus? *Fabr. Mant. Ins.* ii. 10, 93; *Sp.* ii. 20, 82; *Ent. Syst.* iii. 69, 25.

Wings brown, with numerous transverse undulating slender pale brown or testaceous lines, and with a broader paler and more distinct slightly undulating band, which is narrower and more clearly defined on the fore wings than on the hind wings; the tails of the latter, like those of *N. Lunus*, are reddish at the inner angle, and have each three black ocelli with blue disks and red borders. Smaller than *N. Lunus*.

a. Jamaica. From Mr. Gosse's collection.

5. NYCTALEMON EXCAVATUS.

Alæ caudatæ, fuscae, lineis plurimis transversis testaceis fuscisque duabus latioribus fuscis undulatæ; posticæ ocellis caudalibus subternis.

Smaller than *N. Ægistus*. Wings brown, with very numerous transverse undulating slender testaceous nearly parallel lines, and with two broader brown corresponding bands, which are much more irregular than in the preceding species, whose bands are in an equal

degree less straight than those of *N. Lunus*. Length of the body 9—11 lines; of the wings 38—40 lines.

a. ———? Presented by E. Doubleday, Esq.

b. St. Domingo. From Mr. Cuming's collection.

6. NYCTALEMON? LAVINIA.

Alæ caudatæ, nigræ, viridi fasciatæ, subtus argentatæ, strigis fulvis.

Papilio Lavinia, *Fabr. Ent. Syst.* iii. 1, 22, 64.

Corpus nigrum palpis albis. Alæ anticæ dentatæ, nigræ, fascia e maculis quinque oblongis viridibus. Maculæ tres minores virides intra fasciam et marginem crassiorem, subtus albo, fulvo argenteoque variegatæ litura atra ad marginem crassiorem, in qua lineola alba, bifida cæruleaque flexuosa. Alæ posticæ caudatæ, nigræ, fascia baseos integra et posteriore e maculis septem viridibus. Angulus ani fulvus. Subtus argentatæ strigis tribus fulvus. Fascia alba in medio alæ. Margo posticus fulvus terminatur striga tenuissima, alba.

Papilio?

America.

Tribe 4. CASTNII.

Antennæ simplices, apud medium vel apice plus minusve incrassatæ. Proboscis valde distincta. Palpi valde extantes, articulis semper bene determinatis.]

Castnii (*Agaristites* et *Castnites*), *Blanchard, Hist. Nat. Ins.* ii. 349, 350. *Chenu, Enc. d'Hist. Nat. Pap.* 232.

Sphingides, p., *Latr.*

Zygænides, p., *Latr.*

Hesperi-Sphinges, *Latr.*

Agaristidæ et *Castniadæ*, *Swainson.*

Agaristides, *Boisd.*

Agaristiadæ, *Harris.*

Zygænidæ, p., *Kirby.*

The Castnii, like many other small tribes, are much more diversified in structure than the large groups which they connect. Some resemble the *Hesperiæ*, others the *Nymphalidæ* or the *Heliconii*, or the *Noctuidæ*, while several are hardly distinguishable

from the *Lithosii*. Herrick-Schæffer in one of his diagrams illustrates the convergence of the various tribes of *Pupilionidæ* to *Hesperia*, whence the divergence is by means of *Urania* and *Coronis* to *Geometrides*, by *Castnia* to *Noctuides*, by *Agarista* to *Bombycides*, and by *Ægocera* and *Cocytia* to *Sphingides*.

Genus 1. EUSCHEMON.

Maxillæ sat longæ. Palpi labiales mediocres; articulus 1us brevissimus, compressus, arcuatus, squamosus pilosus; 2us subcylindricus, squamosus, 1o quadruplo longior; 3us longi-ovatus, brevis, subsquamosus, 2o gracilior. Antennæ longæ, clava fusiformi valde hamata terminatæ. Oculi magni. Frons lata. Alæ anticæ trigonæ; posticæ latæ, subovatæ. Pedes sat longi; tibiæ anticæ intus spina arcuata armatæ; tarsi antiqui tibiis duplo longiores, articulo 1o longissimo, tibiæ posteriores spinis plurimis minutis lateralibus duabusque validis apicalibus armatæ, tarsis triente breviores; ungues validi, simplices.

Euschemon, *Doubleday*, *Stokes' Discoveries in Australia*, i. *Appendix*, 513.

Hesperia, p., *MacLeay*; *Westw.*

“Maxillæ moderately long. Labial palpi of moderate length, basal joint very short, compressed, curved, clothed with scales and long hairs, second joint about four times as long as the first, subcylindric, clothed with long scales, third joint clothed with small scales, short, elongate-oval, more slender than the second, the scales of which almost conceal it. Antennæ elongate, with a fusiform club much hooked at the extremity. Eyes large. Forehead broad. Fore wings triangular, the outer and inner margins nearly equal, about two-thirds the length of the anterior. Costal vein about two-thirds the entire length of the wing; subcostal veinlet slightly deflected towards the end of the areolet, throwing off its first veinlet at about one-third of its length, the second about the middle of its course, the space between the origins of the second and third veinlets not so long as that between the first and second, the fourth arising just before the end of the areolet; upper disco-cellular veinlet very short, the second discal equidistant from the first discal and the third median veinlet, the disco-cellular veinlets almost atrophied; median veinlet throwing off its first veinlet not far from the base, the third veinlet a little bent where the disco-cellular joins it, radial vein running nearly parallel with the inner margin throughout its whole length, reaching the outer margin a little above the anal angle. Hind wings broad, semi-ovate, costal vein long, sub-

costal terminating in only two veinlets; discal veinlet nearly atrophied; disco-cellular the same, united with the third median veinlet; areolet rather large. Base of these wings in the male with a strong bristle passing behind a strong corneous retinaculum, which arises from the anterior side of the subcostal vein. Legs rather long; fore tibiae with a curved spine on the inside, covered by the long scales of the tibiae; fore tarsi twice the length of the tibiae, basal joint longer than the rest combined, second and third equal, the two combined equal to about two-thirds the length of the first; fourth and fifth very short, together about equal to the third. Middle legs with the tibiae about two-thirds as long as the tarsi, with numerous minute spines along their sides, and two stout ones at the apex; joints of the tarsi having about the same relative proportions as in the fore pair. Hind tibiae and tarsi nearly as in the middle pair. Claws of all the tarsi stout, simple."—*Doubleday*.

Nearly allied to *Hesperia*, as is also the following genus.

1. EUSCHEMON RAFFLESIA.

Atra, caput albo guttatum subtus rufum; abdomen apice rufum; alae fascia maculari semidiaphana flava in posticis latiore, antica fascia apicali subviridescente, postica viridescente marginata. Long. 11 lin.; alar. 36 lin.

Hesperia Rafflesia, MacLeay, Appendix to King's Survey of Australia, 463.

Euschemon Rafflesia, Doubleday, Appendix to Lort's Discoveries in Australia, i. 514. Ins. pl. 3, f. 1, 2.

"Fore wings black above, with a transverse macular sulphur-coloured band beyond the middle, and a submarginal one, broadest towards the apex, composed of greenish atoms. Hind wings with a large oval sulphur-coloured spot in the areolet, separated only by the median vein from a smaller one in the abdominal margin near the base, and followed by a subtrigonal divided into three parts by the median veinlets. Markings on the under side nearly as above, with the addition of a greenish line along the costa of the fore wings, bending hindwards at its termination. Hind wings encircled by a marginal band of the same greenish colour. Body black. Orbits of the eyes and a line across the vertex white. Palpi bright crimson, except the last joint, which is black. Abdomen whitish at the base and on the edges of four of the segments; last segment bright crimson; under side whitish at the base, crimson beyond the middle."—*Doubleday*. Length of the wings 33 lines.

a, b. Australia. From Mr. Children's collection.

Genus 2. COCYTIA.

Antennæ fusiformes, subuncinatae. Palpi dilatati, 3-articulati, articulo 1o brevior, 2o paullo longior, ambobusque squamosis, 3o longo, nudo, gracili, cylindrico, ultra frontem ascendente. Lingua longa, cornea. Alæ horizontales, vitreæ.

Cocytia, *Boisd. Mon. Zyg.* 22; *Voy. de l'Astrolabe*, Pt. 1, *Lep.* 191. *Blanch. Hist. Nat. Ins.* ii. 350. *Chenu, Enc. d'Hist. Nat. Pap.* 234.

1. COCYTIA DURVILLII.

Alæ omnes utrinque aterrimæ, venis nigris in disco vitreo, maculaque fulva ad basin; antennæ longæ, fusiformes, atræ; caput, humeri, corpus, palpi, pectus, femora, et venter æneo-cyaneo micantia.

Cocytia Durvillii, *Boisd. Mon. Zyg.* 22, pl. 1, f. 1; *Voy. de l'Astrolabe*, Pt. 1, *Lep.* 191; *Spec. Gén. Léop.* i. pl. 15, f. 1. *Chenu, Enc. d'Hist. Nat. Pap.* 233, f. 397.

a, b. New Guinea. Presented by J. Macgillivray, Esq.

Genus 3. HESPAGARISTA.

Corpus subcylindricum. Caput parvum. Oculi magni. Palpi brevissimi, caput non superantes; articulus 3us minimus. Antennæ corpore multo breviores, extrorsum crassiores, apice subhamatæ et attenuatæ. Abdomen lineare, sat longum. Alæ subtrigonæ. Pedes pilosi, breves, validi; tibiæ anticæ subtus dentatæ, posteriores calcaribus longis validis. *Mas.* Abdomen apice fasciculo longissimo instructum.

Body subcylindrical. Head small. Eyes rather large. Proboscis moderately long. Palpi very short, not extending above the head; third joint very small. Antennæ very much shorter than the body, slightly thickening from the base till near the tips, where they are slightly hooked and attenuated. Abdomen linear, rather long. Wings subtrigonal; fore wings very much longer and a little narrower than the hind wings. Legs hairy, rather short and stout; fore tibiæ dentate beneath; apical spurs of the posterior tibiæ and intermediate spurs of the hind tibiæ rather long and stout. *Male.* Abdomen thickly clothed at the tip with long hairs which form a tuft at the tip of at least half its length.

This and the following genus have some resemblance to *Hesperia* and to *Agarista*.

1. HESPAGARISTA INTERLECTA.

Mas. Nigra, nigro-hirta; thorax luteo-hirtus; alæ anticæ guttis basalibus fasciis duabus interruptis maculaque albido-flavis strigisque transversis cyaneis; posticæ fasciis duabus interruptis albido-flavis.

——— ? *Angas, Kaffirs Illustrated*, pl. 30, f. 10.

Male. Black, clothed with black hairs. Proboscis tawny. Thorax thickly clothed with luteous hairs. Abdomen with a black apical tuft. Fore wings with whitish yellow spots which form some dots at the base, two interrupted bands, and an intermediate spot in front; the first band is composed of two spots; the second of three; between these are some transverse blue streaks. Hind wings with two interrupted whitish yellow bands. Length of the body 9 lines; of the wings 24 lines.

a. South Africa. Presented by G. F. Angas, Esq.

b. Port Natal. From M. Gueinzus' collection.

Genus 4. DAMIAS.

Caput mediocre. Oculi sat magni. Lingua longa. Palpi erecti, caput paullo superantes; articulus 1us hirtus squamosus; 2us nudus, gracilis, 1o paullo brevior; 3us brevissimus. Antennæ graciles, corpore paullo breviores, apices versus subincrassatæ, apice acuminatæ. Thorax crassus. Abdomen sat longum, subattenuatum. Alæ anticæ subtrigonæ, posticis multo longiores paullo angustiores; posticæ margine postico rotundato. Pedes longi; tibiæ posteriores calcaribus duobus apicalibus longis, posticæ calcaribus duobus intermediis longis.

Damias, Boisd. Voy. de l'Astrolabe, Pt. 1, Lep. 259.

1. DAMIAS ELEGANS.

Alæ nigræ, micantes, fascia discali alba communi; anticæ fascia arcuata rubro-ferruginea apicali; anus floccosus.

Damias elegans, Boisd. Voy. de l'Astrolabe, Pt. 1, Lep. 259, 1.
New Guinea.

2. DAMIAS MELAXANTHA.

Alæ nigro-violaceæ ; anticæ macula externa aurantiaca ; posticæ fascia lata aurantiaca fimbriaque nigra ; subtus concolores.

Damias melaxanthe, *Boisd. Voy. Duperrey, Texte, Zool.* 286.

Cleis posticalis, *Guér. Voy. Duperrey, Atlas, Ins.* pl. 18, f. 5.

Port Praslin. New Ireland.

3. DAMIAS DICHROA.

Alæ nigro-fusæ, subtus concolores ; anticæ fascia aurantiaca ad costam incipiente, subtus strigis violaceis ; posticæ immaculatæ, fœm. fascia marginali aurantiaca.

Damias dichroa, *Boisd. Voy. de l'Astrolabe, Pt. 1, Lep.* 260, 3.

Offack and Bourou.

4. DAMIAS VARIA.

Nigra, flavo-hirta ; caput albo-hirtum ; abdomen apice nigro-hirtum ; alæ anticæ striga basali flava maculisque tribus albis ; posticæ vitta discali flava.

Black. Head and palpi at the base clothed with white hairs. Thorax and abdomen clothed with yellow ; tip of the latter with black hairs. Fore wings with a short yellow streak at the base, and with three white spots forming a triangle in the disk, one about the middle, the other two nearer the tip, one in front, the other behind. Hind wings with a broad yellow stripe which does not extend to the tip ; it is straitened beyond the middle and dilated or capitate beyond. Legs piceous ; hind tibiæ testaceous. Length of the body 8 lines ; of the wings 22 lines.

α. Richmond River, Australia. From Mr. Stevens' collection.

Genus 5. CASTNIA.

Caput parvum, ocellis distinctis. Palpi triarticulati, appressi, obtusiusculi, dimidia fronte vix longiores. Antennæ clava distincta, acuminata, apice tenui, flexo, floccoso. Abdomen majusculum,

conicum. Alæ incumbentes, amplæ, margine integerrimo; posticæ areola brevissima, retinaculo munita.

Castnia, *Fabr. Illig. Mag. (Syst. Gloss.)* vi. 280, 7. *Latr. Gen. Crust. et Ins.* iv. 209. *Cuv. Règ. Anim.* iii. 556. *Enc. Méth.* ix. *Art. Pap.* *Dalman, Prodr. Mon. Castn.* 4. *Act. Holm.* 1824, 395. *Blanch. Hist. Nat. Ins.* ii. 350. *Chenu, Enc. d'Hist. Nat. Pap.* 485. *Croch.*
Papiliones Danaï Festivi, *Stoll.*

Div. 1.

Body thick.

Sub-div. 1.

Fore-wings slightly angular at the tips. Hind-wings rounded.

Sect. 1.

Wings very broad.

1. CASTNIA DÆDALUS.

Alæ atræ, nitidæ, fasciis duabus albis, anticarum repandis, posticarum macularibus. Alar. long. 84—90 lin.

Papilio Dædalus, *Cram. Pap. Exot.* ii. pl. 1, f. A. B. *Oliv. Enc. Méth. Ins.* pl. 12, f. 1.

Papilio Cyparissias, *Fabr. Gen. Ins. Mant.* 257; *Spec. Ins.* 252, 226; *Ent. Syst.* iii. 1; *Mant. Ins.* ii. 25, 259, 39, 415. *Gmel. ed. Syst. Nat.* i. 5, 2273, 439. *Herbst*, pl. 118, f. 1, 2, vi. 10, 1. *Shaw's Miscell.* pl. 574.

Castnia Cyparissias, *Latr. et God. Enc. Méth.* ix. 797. *Lam. Hist. Nat. Anim. sans Vert.* iv. 14, 3. *G. R. Gray, Syn. Gen. Castnia, Trans. Ent. Soc. Lond.* ii. 142, 1.

Castnia Dædalus, *Lam. Hist. Nat. Anim. Invert.* iv. 14, 2. *Dalm. Mon. Cast. Act. Holm.* 1824, 398, 1.

Eupalamides Dædalus, *Hübner. Verz. Schmett.* 101, 1068.

Surinam.

2. CASTNIA LATREILLII.

Alæ antica fusco-olivaceæ, maculis obscurioribus fasciæque obliqua sordide alba; postica nigræ, punctis intra marginalibus cærulescentibus. Alar. long. 63 lin.

Castnia Latreillei, Godart, *Enc. Méth.* ix. 797. *Lam. Hist. Nat. Anim. Invert.* iv. 142. *Perty, Del. Anim. Artic. Bras.* pl. 30, f. 7.

G. R. Gray, Syn. Gen. Castn. Trans. Ent. Soc. Lond. ii. 142, 2.

Castnia Actor, *Dalm. Monogr. Castn. Act. Holm.* 1824, 398, 2, pl. 1, f. 1.

Eupalamides Ctesiphon, *Hübner, Exot. Schmett.* ii. *Lép.* i. *Pap.* ii. *Gentiles*, v. *Telchines B. Terribiles*, i. f. 1, 2.

Brazil.

a. b. Pernambuco. Presented by J. P. G. Smith, Esq.

3. CASTNIA ATYMNUS.

Alæ nigræ, cyaneo-viridescentes, fascia obliqua alba, anticarum angustæ, posticarum dilatata, margine immaculatæ; antennæ apice, abdomen, corpusque subtus albida. Long. alar. 48 lin.

Castnia Atymnus, *Dalm. Monogr. Castn.* 12; *Act. Holm.* 1824, 400, 6. *G. R. Gray, Syn. Gen. Castn. Trans. Ent. Soc. Lond.* ii. 142, 3.

Castnia Spixii, *Perty, Del. Anim. Artic. Braz.* pl. 30, f. 2.

Brazil.

a. Honduras. From Mr. Dyson's collection.

b. Brazil. From Mr. Milne's collection.

c. Brazil. From Mr. Stevens' collection.

d. Venezuela. From Mr. Dyson's collection.

e. ———? From Mr. Children's collection.

4. CASTNIA PYLADES.

Alæ atræ, nitidæ, cyaneo viridique micantes; anticæ fasciis duabus repandis, supra albidis, subtus rufescentibus; postico fasciæ marginali utrinque fulvo nigroque maculata. Long. alar. 66 lin.

Papilio Pylades, *Cram. Pap. Exot.* pl. iv. 387, f. A. B. *Herbst, Icon.* pl. 135, f. 1, 2. *Shaw's Miscell.* pl. 895. *Oliv. Enc. Méth. Ins.* pl. 12, f. 2.

Castnia Pylades, Latr. et God. *Enc. Méth.* ix. 797. *Dalm. Monogr. Castn. Act. Holm.* 1824, 399, 3. *G. R. Gray, Syn. Gen. Castn. Trans. Ent. Soc. Lond.* ii. 142, 4.

Coryphantes Pylades, Hübn. *Verz. Schm.* 101, 1066.

a. Parà. Presented by Gordon Graham, Esq.

5. CASTNIA LICUS.

Alæ atræ, cyaneo-viridescens, nitidæ; anticæ sesquifascia alba; posticæ unica repanda alba, serie marginali e maculis rubris; posticarum pagina inferiore cinerea. Long. alar. 48 lin.

Papilio Licus, Cram. *Pap. Exot.* iii. 49, pl. 223, f. A. B. *Fabr. Ent. Syst.* iii. 45, 137. *Herbst, Ins.* pl. 134, f. 3, 4. *Drury, Ins.* i. pl. 16, f. 1, 2. *Merian, Ins. Surin.* pl. 36. *Oliv. Enc. Méth. Ins.* pl. 12, f. 4. *Seba, Mus.* iv. pl. 19, f. 11, 12, pl. 21, f. 10.

Castnia Licus, Latr. et God. *Enc. Méth.* ix. 797, 3. *Dalm. Monogr. Castn. Jones, Pap. Icon.* iii. pl. 73, f. 3, 4. *G. R. Gray, Syn. Gen. Castn. Trans. Ent. Soc. Lond.* ii. 143, 5. *Chenu, Enc. d'Hist. Nat. Pap.* 235, f. 402. *Crochard, ed Règ. Anim. Atlas, Ins.* pl. 145, f. 1.

Corybantes Licus, Hübn. *Verz. Schm.* 101, 1064.

Urbanus Celebris Licus, Hübn. *Samml. Exot. Schm.* i. *Lep.* i. *Pap.* ii. *Gentiles, v. Urbani A. Celebres*, a. f. 1, 2.

Surinam. Demerara.

a. ———? Presented by J. G. Children, Esq.

b. Demerara. From Mr. Bower's collection.

c. Parà. From Mr. Bates's collection.

d. Brazil. From Mr. Bates's collection.

e. Ega, on the Amazon. From Mr. Bates's collection.

f, g. Brazil.

6. CASTNIA ZERYNTIA.

Alæ anticæ fusco-olivaceæ, nitidæ, basi cyaneo-viridescens, fascia bifida sordide alba, apice punctis albo-hyalinis; posticæ nigræ, basi fusco-olivaceæ, fascia media lata alba, margine nigro, striga maculisque flavis. Long. alar. mar. 54 lin.; fœm. 72 lin.

Castnia Zerynthia, *G. R. Gray, Syn. Gen. Castn. Trans. Ent. Soc. Lond.* ii. 144, 11.

- a. Brazil. From Mr. Mornay's collection.
 b, c. ———? From Mr. Children's collection.

7. CASTNIA EUDESMIA.

Alæ subcinereo-fuscae, fimbria alba; anticæ fasciis obliquis duabus albis; posticæ nigræ, cæruleo-nitidæ, basi fasciisque macularibus rubris, maculis pupillis albis, margine posteriore subcinereo-fusco. Long. alar. 55 lin.

Castnia Eudesia, G. R. Gray, *Syn. Gen. Castn. Trans. Ent. Soc. Lond.* ii. 145, 14.

- a. Chili. From Mr. Children's collection.

8. CASTNIA ICARUS.

Alæ fuscae, nitidæ, cyaneo viridique micantes, fasciis tribus albis; posticæ rubræ, strigis duabus undulatis limboque nigris. Alar. long. 42—48 lin.

Papilio Icarus, *Cram. Pap. Exot.* i. 26, pl. 18, f. A. B. *Shaw's Miscell.* 692. *Oliv. Enc. Méth. Ins.* pl. 12, f. 3.

Castnia Icarus, *Latr. et God. Enc. Méth.* ix. 798. *Dalm. Monogr. Castn. Act. Holm.* 1824, 399, 4. G. R. Gray, *Syn. Gen. Castn. Trans. Ent. Soc. Lond.* ii. 144, 9.

Urbanus Celebris Icarus, *Hüb. Samml. Exot. Schmett.* i. *Lep.* i. *Pap.* ii. *Gentiles*, ii. *Urbani A. Celebres*, a. f. 3, 4.

Corybantes Icarus, *Hüb. Verz. Schmett.* 101. 1063.

Surinam.

- a. ———? Presented by J. G. Children, Esq.
 b. ———? Presented by E. Doubleday, Esq.
 c. Cayenne. From M. Becker's collection.

9. CASTNIA FABRICII.

Fœm. Alæ anticæ ferrugineæ, fascia obscura sinuosa, et macula discali; posticæ pallide testaceæ, fasciis tribus interruptis crenatis nigris, serie e maculis juxta marginem ovatis, nigris. Alar. long. 63 lin.

Castnia Fabricii, Swainson, *Zool. Ill.* iii. f. 149. *Thon's Ent. Archiv.* 1829, 123, b. *G. R. Gray, Syn. Gen. Castn. Trans. Ent. Soc. Lond.* ii. 144, 10.

Brazil.

10. CASTNIA FONSCOLOMBEI.

Alæ anticæ supra ferrugineæ, nitidæ, fascia obscuriore, fœm. disco punctis quinque hyalino-flavescentibus; posticæ flavo-testaceæ, basi ferrugineæ, serie postica e maculis nigris. Long. alar. 54 lin.

Castnia Fonscolombi, *Latr. et God. Enc. Méth.* ix. 799, 13. *G. R. Gray, Syn. Gen. Castn. Trans. Ent. Soc. Lond.* ii. 144, 12.

Athis Japyx, Hübn. *Exot. Schmett.* ii. *Lep.* i. *Pap.* ii. *Gentiles, v. Telchines A. Versicolores*, 2, f. 1, 2.

a, b, Brazil. From Mr. Children's collection.

c. Brazil. From Mr. Stephens' collection.

11. CASTNIA COCHRUS.

Alæ concolores atræ, nitidæ, omnium disco fascia abbreviata alba; abdomen postice cingulis sanguineis albo marginatis. Alar. long. 54 lin.

Papilio Cochrus, *Fabr. Ent. Syst.* iii. 42, 125. *Donov. Nat. Repos.* v. pl. 150. *Jones, Icon.* iii. pl. 77, f. 1.

Castnia Cochrus, *Latr. et God. Enc. Méth.* ix. 798. *G. R. Gray, Syn. Gen. Castn. Trans. Ent. Soc. Lond.* ii. 147, 25.

Castnia Maris, *Dalm. Monogr. Castn. Act. Holm.* 1824, 401, 9.

Prometheus Casmilus, Hübn. *Exot. Schmett.* ii. *Lep.* i. *Pap.* ii. *Gentiles, v. Telchines B. Terribiles*, 2, f. 1, 2.

a, b. Brazil. From Mr. Children's collection.

12. CASTNIA GERON.

Alæ fusco-cinereæ, certo situ violaceo viridique nitentes; anticæ supra fasciis duabus albis, subtus medio pilis longis barbatae; posticæ supra basi discoque barbatae, margine postico flavido maculatae, subtus dense squamosæ, duplici serie e maculis albis obsoletis. Long. alar. 64 lin.

Castnia Geron, Kollar, *Lep. Bras. Sp. Nov. Ann. Wien. Mus. Nat.* i. 217, pl. 13, f. 1.

Brazil.

13. CASTNIA HARMODIUS.

Alæ nigrae, cyaneo-viridescentes; anticæ fascia obliqua strigaeque interrupta, supra flavis, subtus albis; posticæ fascia intramarginali ferruginea ante angulum analem subinterrupta. Long. alar. 48 lin.

Papilio Harmodius, *Cram. Pap. Exot.* iii. 49, pl. 223, f. C. D.

Papilio Syphax, *Fabr. Syst. Ent.* 48, 165; *Sp. Ins.* ii. 53, 234; *Mant. Ins.* ii. 26, 271; *Ent. Syst.* iii. 1, 45, 135. *Herbst, Ins.* vi. 73, pl. 134, f. 1, 2. *Jones, Pap. Icon.* iii. pl. 74, f. 1.

Papilio Pirrha, *Oliv. Enc. Méth. Ins.* pl. 16, f. 2.

Castnia Licus, var. *Latr. et. God. Enc. Méth.* ix. 797.

Castnia Harmodius, *Dalm. Mon. Castn. Act. Holm.* 1824, 399, 5. *G. R. Gray, Syn. Gen. Castn. Trans. Ent. Soc. Lond.* ii. 143, 6.

Corybantes Syphax, *Hübner. Verz. Schmett.* 101, 1065.

Surinam.

a. Parà. Presented by J. P. G. Smith, Esq.

b, c. Parà. From Mr. Bates' collection.

d. ———? From Mr. Lee's collection.

14. CASTNIA EVALTHE.

Nigro-fusca; alæ integerrimæ; anticæ fasciis duabus (aut una) obliquis flavis; posticæ vitta una e maculis flava, maculisque posticis rufis, subtus rufæ.

Papilio Dardanus, *Cram. Pap. Exot.* i. pl. 17, f. E. F.

Papilio Evalthe, *Fabr. Syst. Ent.* 480, 166; *Sp. Ins.* ii. 53, 235; *Mant. Ins.* ii. 26, 272; *Ent. Syst.* iii. 1, 45, 136. *Donov. Nat. Hist. Ins. Ind. Lepid.* pl.

Papilio Evalthus, *Herbst, Icon.* pl. 137, f. 1, 2. *Goetze, Ent. Beitr.* iii. 1, 202, 4.

Castnia Evalthe, *Latr. et God. Enc. Méth.* ix. 798. *Dalm. Monogr. Castn. Act. Holm.* 1824, 401, 8. *G. R. Gray, Syn. Gen. Castn. Trans. Ent. Soc. Lond.* ii. 143, 7.

Corybantes Dardanus, *Hübner. Verz. Schmett.* 101, 1062.

Brazil. Surinam.

- a. Mexico. From Mr. Argent's collection.
- b. Pará. Presented by Gordon Graham, Esq.
- c. Cayenne. From Mr. Lee's collection.

15. CASTNIA EUPHROSYNÆ.

Alæ fusco-nigræ, viridescentes, nitidæ; anticæ sesquifasciæ; posticæ macula magna, flavis; hæ macularum aurantiacarum serie ad marginem posticum, subtus aurantiacæ. Alar. long. 32 lin.

Castnia Euphrosynæ, Perty, Del. Anim. Artic. pl. 30, f. 1. G. R. Gray, Syn. Gen. Castn. Trans. Ent. Soc. Lond. ii. 144, 8.
C. Evalthe. Var.?

- a, b. Brazil. From Mr. Argent's collection.
- c. Brazil. From Mr. Stevens' collection.

16. CASTNIA PELASGUS.

Alæ atræ; anticæ virescentes fasciæ fulvæ; posticæ nigræ, immaculatæ. Alar. long. 30 lin.

Papilio Pelasgus, Fabr. Sp. Ins. ii. 54, 236; Mant. Ins. ii. 26, 274; Ent. Syst. iii. 46, 139. Cram. Pap. Exot. iii. 16, pl. 202, f. D. Herbst. Ins. 84, 45, pl. 136, f. 6. Oliv. Enc. Méth. Ins. pl. 12, f. 5.

Castnia Pelasgus, Latr. et God. Enc. Méth. ix. 801. Dalm. Monogr. Castn. Act. Holm. 1824, 404, 14. G. R. Gray, Syn. Gen. Castn. Trans. Ent. Soc. Lond. ii. 146, 20.

Castnius Pelasgus, Hübn. Verz. Schmett. 102, 1075.

Surinam.

- a. Ega, on the Amazon. From Mr. Bates' collection.
- b. Bolivia. From Mr. Bridges' collection.
- c. Brazil. From Mr. Argent's collection.

Sect. 2.

Wings rather narrower. Fore-wings longer.

17. CASTNIA SATRAPES.

Alæ anticæ supra viridi-fusæ, fasciis duabus latis flavidis fusco adpersis, altera ad marginem internum, altera versus apicem ; posticæ flavo-rubræ, radiis limboque nigro, hoc flavo maculato ; omnes subtus ejusdem coloris sed magis dilutæ ; anticæ basi costali rubra. Long. corp. 15 lin. ; alar. 42 lin.

Castnia Satrapes, Kollar, *Lep. Bras. Sp. Nov. Ann. Wien. Mus. Nat.* i. 216, pl. 12, f. 3.

Brazil.

18. CASTNIA THERAPON.

Alæ anticæ elongatæ, supra flavescente-rufæ, margine interno striatæ ab angulo baseos interno versus apicem oblique decurrente, macula costæ punctisque duobus infra apicalibus nigro-fuscis ; posticæ rubræ, margine postico nigro, serie punctorum flavorum ; omnes subtus pallide rubræ, anticæ macula costæ sinuata, posticæ margine postico nigro, hoc serie duplici punctorum cærulescentium et flavorum. Long. corp. 12 lin. ; alar. 36 lin.

Castnia Therapon, Kollar, *Lep. Bras. Sp. Nov. Ann. Wien. Mus. Nat.* i. 218, pl. 13, f. 3.

Rio Janeiro.

19. CASTNIA INVARIA.

Fusca ; corpus subtus et abdomen testacea ; alæ cyaneo viridique nitentes ; anticæ fasciis tribus hyalinis ; posticæ rufæ basi albidæ, fascia antica maculari hyalina, fascia brevioris marginis postico nigris, hoc maculis 2 vel 3 rufis.

Brown. Body beneath and abdomen testaceous. Wings with blue and green reflections. Fore wings with three hyaline bands, two oblique, the third short, nearer the tips, and upright. Hind wings red, whitish at the base, in front with a hyaline short band composed of oblong spots, and with a shorter black band ; hind border black, with two or three red spots.

a. Rio Janeiro. From Mr. Stevens' collection.

20. CASTNIA ARDALUS.

Alæ anticæ olivaceo-fuscae, fascia obliqua sinuosa maculaque subcinereis; posticæ nigrae, fascia media punctisque intramarginalibus albis, fasciaeque intermedia rubra maculari. Alar. long. 36 lin.

Castnia Ardalus, *Dalm. Monogr. Castn. Act. Holm.* 1824, 403, 10.
G. R. Gray, Syn. Gen. Castn. Trans. Ent. Soc. Lond. ii. 147, 22.

Castnia Pallasia, *Esch. in Kotz. Itin.* iii. 27, pl. 6, f. 27.

a. Rio Janeiro. From Mr. Stevens' collection.

b. ———? From Mr. Children's collection.

21. CASTNIA BREDCOURTII.

Alæ atræ, nitidæ; anticæ fascia difformi albida; posticæ fasciis duabus transversis albis intermediaque miniacea. Alar. long. 36 lin.

Castnia Bredcourtii, *Latr. et God. Enc. Méth.* ix. 798. *G. R. Gray, Syn. Gen. Castn. Trans. Ent. Soc. Lond.* ii. 147, 23.

C. Ardalus?

Brazil.

22. CASTNIA INCA.

Fusca, cyaneo et viridi micans; alæ anticæ ferrugineæ, vel cinereæ, striga obliqua fasciisque undulatis fuscis guttisque duabus subapicalibus hyalinis, subtus nigro fasciata; alæ posticæ nigrae fascia lata aurantiaca guttisque albidis vel aurantiacis posticis marginalibus, subtus pallidiores.

Castnia Inca, *MSS.*

Brown, with blue and green reflections. Fore wings ferruginous or cinereous, with an oblique streak and with imperfect undulating bands of brown, and with two hyaline dots near the tips; under side brighter ferruginous and with black bands. Hind wings black, with a broad orange band, and with a row of whitish or orange spots along the hind border; under side testaceous, with a

curved brown stripe in front, brown with whitish or testaceous spots towards the hind border.

- a. Mexico. From M. Hartweg's collection.
- b. Venezuela. From M. Becker's collection.
- c. Honduras. From Mr. Dyson's collection.

The Mexican specimen differs much from the two others. The fore wings are more ferruginous. The hind wings are orange, black at the base, and with a black stripe, between which and the black hind border there is a row of black-divided spots.

23. CASTNIA PALATINUS.

Alæ anticæ ferruginæ, nitidæ, puncto ocellari nigro; posticæ nigre, fascia media strigae apice maculari albido-flavescentibus. Alar. long. 42 lin.

Papilio Palatinus, *Cram. Pap. Exot.* ii. 98, pl. 159, f. B. C.

Castnia Palatinus, *Latr. et God. Enc. Méth.* ix. 799. *Dalm. Monogr. Castn. Act. Holm.* 1824, 403, 11. *G. R. Gray, Syn. Gen.*

Castn. Trans. Ent. Soc. Lond. ii. 147, 24.

Athis Palatinus, *Hüb. Verz. Schmett.* 101, 1067.

Surinam. Demerara.

- a. Parà. From Mr. Bates's collection.
- b. ——— ? From Mr. Children's collection.

24. CASTNIA SUBVARIA.

Fusca, viridi-nitens; abdomen apice fulvum; alæ anticæ maculis nonnullis magnis pallidioribus, guttisque duabus vel tribus semihyalinis subapicalibus, subtus testaceæ fusco fasciatæ; alæ posticæ marginibus posticis fulvis fusco guttatis.

Brown with slight green reflections. Tip of the abdomen tawny. Fore wings with some large paler blotches, and with two or three semihyaline dots near the tip; under side testaceous, brown at the base and at the tips, and with two irregular darker brown bands in the disk. Hind wings tawny towards the hind borders, near which there is a row of slightly connected brown dots.

- a. Rio Janeiro. From Mr. Stevens' collection.

Sub-div. 2.

Fore wings more distinctly angular at the tips. Hind wings slightly angular.

25. *CASTNIA DALMANNII*.

Alæ anticæ ferruginæ, viridi-cyanescentes, maris fasciis duabus obsoletis; fœm. olivaceæ, fascia alba angusta, et punctis hyalinis duobus; posticæ rubræ, basi strigis maculisque juxta marginem, nigris; maris disco flavo, et fœm. albo. Alar. long. mar. 42; fœm. 48 lin.

Castnia Dalmannii, G. R. Gray, *Syn. Mon. Castn. Trans. Ent. Soc. Lond.* ii. 145, 13.

a. Brazil. From Mr. Children's collection.

26. *CASTNIA HEGEMON*.

Alæ anticæ supra obscure fusæ, basi fasciæque media, extus bipartita, obsolete saturatiores; posticæ supra rubræ, macula baseos, striis duabus ad angulum analem nigro-fuscis, fascia media flava; subtus ferruginæ, omnes basi, posticæ et margine interno albæ. Long. corp. 15 lin.; alar. 36 lin.

Castnia Hegemon, Kollar, *Lep. Bras. Sp. Nov. Ann. Wien. Mus. Nat.* i. 217, pl. 13, f. 2.

a. Rio Janeiro. From Mr. Children's collection.

b. Rio Janeiro. From Mr. Stevens' collection.

27. *CASTNIA ORESTES*.

Fusca, cyaneo et viridi varia; antennæ subtus ferruginæ; abdomen albidum; alæ anticæ basi fasciisque tribus fuscis guttaque hyalina; posticæ fascia lata obliqua alba maculisque biseriatis aurantiacis, subtus ferruginæ.

Castnia Orestes, MSS.

Brown, with blue and green reflections. Antennæ ferruginous beneath. Abdomen whitish. Fore wings dark brown at the base, and with three dark brown bands; first oblique, forked hindward;

second not extending beyond half the breadth from the fore border, including a hyaline spot; third extending along the apical margin; under side orange, with brown bands nearly similar to those above. Hind wings with a broad oblique white band which is widened behind, and with two rows of orange spots; under side ferruginous instead of brown, with the exception of a brown spot on each inner angle. Length of the body 15 lines; of the wings 40 lines.

a. Venezuela. From M. Becker's collection.

b. Brazil. From M. Becker's collection.

c. Brazil. From Mr. Bates' collection.

28. CASTNIA BOISDUVALII.

Fusca; antennæ ferruginæ; abdomen plus minusve fulvum; alæ cyaneo viridique micantes; anticæ fascia obliqua obscuriore maculaque antica limpida, subtus aurantiacæ, nigro variæ, apice fuscæ; posticæ aurantiacæ, basi margineque postico maculis interrupto nigris.

Castnia Boisduvalii, MSS.

Brown. Antennæ ferruginous. Abdomen tawny on each side and beneath, or wholly tawny. Wings with blue and green reflections, rather more angular than in those of the three preceding species. Fore wings brown, darker at the base, and with a darker oblique band which is widened in front and behind, or is interrupted in the middle, and includes in front a small limpid spot; under side orange, brown at the tips, and with three or four black marks in the disk. Hind wings orange, black at the base, and along the hind border with a broad black band which includes an irregular partly double row of orange spots; under side wholly orange. Length of the body 14 lines; of the wings 34 lines.

a. Brazil. From Mr. Milne's collection.

b. Brazil. From M. Becker's collection.

29. CASTNIA AMYCUS.

Alæ nigræ, nitidæ; anticæ utrinque fascia punctoque albis; posticæ supra fasciis duabus, subtus pagina omni rubræ. Long. alar. 24 lin.

Papilio Amycus, Cram. Pap. Exot. iii. pl. 227, f. D. E.

Castnia Amycus, Latr. et God. Enc. Méth. ix. 798. Dalm. Monogr.

- Castn. Act. Holm.* 1824, 403, 12. *G. R. Gray, Syn. Gen. Castn. Trans. Ent. Soc. Lond.* ii. 145, 15.
Corybantes Amycus, Hübn. Verz. Schmett. 101, 1061.
 Surinam.
a, b. Brazil. From Mr. Children's collection.

Div. 2,

Body more slender.

Sub-div. 1.

Hind wings slightly angular.

30. CASTNIA MYGDON.

Alæ fuscae, anticae fasciis obscurioribus et pallidioribus indeterminatis; posticae fasciis duabus intramarginalibus e maculis, maris albis, fem. luteis. Alar. long. 36 lin.

Castnia Phalaris, Latr. et God. Enc. Méth. ix. 799.

Castnia Mygdon, Dalm. Mon. Castn. Act. Holm. 1820, 403, 13, pl. 1, f. 2. *G. R. Gray, Syn. Gen. Castn. Trans. Ent. Soc. Lond.* ii. 145, 16.

Synpalamides Mimon, Hübn. Samml. Exot. Schmett. ii. *Lep.* i. *Pap.* ii. *Gentiles*, v. *Telchines B. Terribles*, 2, f. 1, 2.

- a, b.* Brazil. From Mr. Children's collection.
c. Brazil. Presented by Capt. Lord Byron.
d. Brazil. From M. Becker's collection.

31. CASTNIA PHALARIS.

Alæ fuscae, immaculatæ; posticae strigis duabus macularibus albis.

Papilio Phalaris, Fabr. Ent. Syst. iii. 145, 138. *Jones, Icon.* iii. pl. 75, f. 3, 4.

Castnia Phalaris, Dalm. Monogr. Castn. Act. Holm. 1824, 405, 15 *Donov. Nat. Misc.* ii. 47, 1. *G. R. Gray, Syn. Gen. Castn. Trans. Ent. Soc. Lond.* ii. 145, 17.

C. Mygdon, var.?

Brazil.

Sub-div. 2.

Hind wings quite rounded.

Sect. 1.

Fore wings rounded at the tips, moderately long.

32. CASTNIA ACTINOPHORUS.

Alæ anticæ nigræ, radiis plurimis viridi-fuscis, basi fasciæ apicis abbreviata dilute flavis; posticæ luride rubræ, radiis limboque nigris, hoc flavo maculato. Long. corp. 9—12 lin.; alar. 27—33 lin.

Castnia Actinophorus, Kollar, *Lep. Bras. Sp. Nov. Ann. Wien. Mus. Nat.* i. 215, pl. 12, f. 2.

Rio Janeiro, Brazil.

33. CASTNIA DECUSSATA.

Alæ fusco-virides, nitidæ; anticæ fasciis duabus albis decussatis; posticæ unica maculari. Alar. long. 30 lin.

Castnia decussata, Latr. et God. *Enc. Méth.* ix. 799. Hübn. *Exot. Schmett.* iii. pl. f. 639, 640. G. R. Gray, *Syn. Gen. Castn. Trans. Ent. Soc. Lond.* ii. 146, 18.

a, b. Brazil. From Mr. Children's collection.

c. Brazil. From Mr. Argent's collection.

d. Brazil. From Mr. Birch's collection.

34. CASTNIA CRONIS.

Alæ concolores, anticæ nigro-virides, plaga discali maculisque marginalibus albis; posticæ flavæ; thorax niger, puncto humerali sanguineo; abdomen flavum. Alar. long. 36 lin.

Papilio Cronis, Cram. *Pap. Exot.* i. pl. 60, f. C.; pl. 178, f. A. Oliv. *Enc. Méth.* pl. 12, f. 7.

Castnia Cronis, *Latr. et God. Enc. Méth.* ix. 801. *Dalm. Monogr. Castn. Act. Holm.* 1824, 405, 16. *G. R. Gray, Syn. Gen. Castn. Trans. Ent. Soc. Lond.* ii. 146, 21.

Hæmonides Cronis, *Hübner. Verz. Schmett.* 101, 1069.

Surinam.

a. Brazil. From Mr. Bates' collection.

35. CASTNIA STRIGATA.

Fusca, cyaneo viridique varia; abdomen subtus albidum apice fulvum; alæ anticæ vittis duabus basalibus, fascia angulata maculari maculisque nonnullis apicalibus albis, subtus rufescentes; alæ posticæ vittis duabus submarginalibus macularibus albis, subtus albæ dimidio postico rufescentes vittis duabus macularibus albis.

Brown, with blue and green reflections. Abdomen whitish beneath, tawny at the tip. Fore wings with two short nearly parallel white stripes from the base to near the middle; beyond these is an angular varying white band composed of spots, some of which are more or less confluent; a few irregular white spots towards the tip forming an imperfect band; under side reddish towards the base. Hind wings with two submarginal stripes of white spots, the outer band luteous at each end; a whitish stripe occasionally towards the base; under side white, hind half reddish with two stripes of white spots, the inner stripe sometimes bordered in front with black. Length of the body 11—12 lines; of the wings 27—32 lines.

a. Pernambuco.

b. ——— ?

36. CASTNIA HUBNERI.

Alæ anticæ fuscae, fasciis macularibus duabus albis; posticæ nigrescentes basi rufescentes, fascia maculari media albida, altera juxta marginem. Alar. long. 24 lin.

Castnia Hübneri, *Boisd. Cuv. Rèyn. Anim.* iii. 439, pl. 20, f. 2. *G. R. Gray, Syn. Gen. Castn. Trans. Ent. Soc. Lond.* ii. 146, 19.

Var. *Alæ anticæ obscure fuscae, fasciis duabus albis, anteriore longiore continua, posteriore venis alarum interrupta; posticæ basi limboque rubris, disco nigro-albo maculato. Long. corp. 7—10 lin.; alar. 24—28 lin.*

Castnia Sternbergii, Kollar, *Lep. Bras. Sp. Nov. Ann. Wien. Mus. Nat.* i. 216, pl. 12, f. 4.

- a. Brazil. From Mr. Bates' collection.
- b. Brazil. From Mr. Birch's collection.
- c, d. Brazil. From Mr. Children's collection.

Sect. 2.

Fore wings slightly truncated at the tips.

37. CASTNIA CHREMES.

Mas. *Alæ anticæ fuscae violaceo-nitidæ, fasciis duabus subferrugineis; posticæ nigrae violaceo et cæruleo nitidæ, apice maculis fasciæque aureo-testaceis.* Alar. long. 41 lin. Fœm. *Alæ anticæ carneo-subcinereæ, viridi-nitidæ, fasciis duabus ferrugineis; posticæ testaceæ margineque crenato nigris, subtus fascia in medio maculari transversa obscura, ocellis albis.* Alar. long. 39 lin.

Papilio Chremes, Jones, *Pap. Icon.* iii. pl. 72, f. 2. *Fabr. Ent. Syst.* iii. 1, 47, 144.

Fœm. *Castnia Thalaria*, Latr. et God. *Enc. Méth.* ix. 800.

Mas et Fœm. *Corybantes Nicon*, Hübn. *Samml. Exot. Schmett.* ii. *Lep.* i. *Pap.* ii. *Gentiles*, v. *Telchines A. Versicolores*, 1, f. 1—4.

Castnia Nicon, G. R. Gray, *Syn. Gen. Castn. Trans. Ent. Soc. Lond.* ii. 148, 28.

- a, b. Brazil. From Mr. Children's collection.
- c, d. Brazil. From Mr. Stevens' collection.

38. CASTNIA THAIS.

Mas. *Alæ fuscae, nitidæ, fasciis obsoletis carneo-subcinereis, anticarum tribus continuis, posticarum duabus macularibus.* Alar. long. 27 lin. Fœm. *Alæ carneo-subcinereæ fasciis obsoletis; posticæ testaceæ, fasciis duabus margineque crenato nigris, subtus pallidiores, fasciis macularibus duabus obscuris, macula in medio alba.*

Mas. *Castnia Marcel-Serresi*, Latr. et God. *Enc. Méth.* ix. 800. G. R. Gray, *Syn. Gen. Castn. Trans. Ent. Soc. Lond.* ii. 148, 29.

Athis Marcel Serres (*Papilio gentilis* Telchin versicolor), Geyer, *Zutr. Samml. Exot. Schmett.* 27, 356, f. 711, 712.

Fœm. *Papilio* Thais, Drury, *Ins.* iii. pl. 46, f. 4.

Castnia Fabricii, Latr. et God. *Enc. Méth.* ix. 800.

a. Brazil. Presented by W. F. Evans, Esq.

b. Brazil. From M. Becker's collection.

c. Brazil. From Mr. Children's collection.

d. Brazil. From Mr. Stevens' collection.

Sect. 3.

Fore wings rounded at the tips, very long. Resembling the *Heliconii* in structure.

39. CASTNIA LINUS.

Alæ concolores nigræ, maculis flavo-hyalinis; corpus subtus album, supra nigrum; abdomen basi et antennæ apice flava. Alar. long. 39 lin.

Papilio Linus, Cram. *Pap. Exot.* iii. pl. 257, f. A. *Herbst, Ins.* pl. 78, f. 4.

Castnia Linus, Dalm. *Monogr. Castn. Act. Holm.* 1824, 405, 17. G. R. Gray, *Syn. Gen. Castn. Trans. Ent. Soc. Lond.* ii. 147, 26.

Cabirus Linus, Hübn. *Verz. Schmett.* 102, 1072.

Surinam.

a. Brazil. From Mr. Children's collection.

b. Brazil. From Mr. Stevens' collection.

c. Guatimala. From Mr. Stevens' collection.

40. CASTNIA ACRÆOIDES.

Alæ anticæ nigro-fusæ, strigis inter venas nigris, basi et disco obscure flavæ; posticæ rubræ, venis margineque nigris, ultimo maculis parvis albis. Alar. long. 30 lin.

Castnia Acræoides, Boisd. *Guér. Icon. Règn. Anim. Ins.* pl. 83, f. 4; *Spec. Gén. Lép.* i. pl. 14, f. 1. Griff. *Cuv. Anim. Kingd.* pl. 53, f. 4. G. R. Gray, *Syn. Gen. Castn. Trans. Ent. Soc. Lond.* ii. 148, 27.

- a. Brazil. Presented by Lady Harvey.
- b. Brazil. From Mr. Children's collection.
- c. Brazil. From Mr. Argent's collection.

Div. ——— ?

41. CASTNIA KIRSTENII.

Castnia Kirstenii, Thon, *Archiv.* ii.

Genus 6. SYNEMON.

Caput rotundum. Oculi magni. Frons lata. Maxillæ sat longæ. Palpi labiales breves, dense squamosi; articulus 1us brevis; 2us 1o plus duplo longior, apice attenuatus; 3us 2i longitudine apice attenuatus. Antennæ clava brevi valida plus minusve mucronata. Alæ anticæ trigonæ; posticæ subovatæ. Abdomen cylindricum. Pedes antici breves, tibiis spina una valida acuta, tarsorum articulo 1o longissimo. Tarsi spinosi. Ungues simplices. *Mas.* Abdomen arcuatum, apice fasciculatum. *Fæm.* Abdomen apice attenuatum.

Synemon, *Doubleday*, *Append. to Lort's Discov. in Austral.* i. 515.
Hesperia? *White*.

"Head round, eyes large, forehead broad. Maxillæ rather long. Labial palpi short, clothed with long dense scales; first joint short, second more than double the length of the first, tapering towards its tip; third about equal in length to the second, subcylindric, tapering towards the apex. Antennæ with a stout, short club, more or less mucronate at the apex, the mucro mostly if not always with a tuft of scales at the point. Thorax stout. Fore wings triangular, the costal vein terminating about the middle of the costa, the subcostal terminating in five veinlets, of which the first and second are thrown off before the disco-cellular veinlet, the third almost immediately beyond it, the fourth rather further from the third than this is from the second; discal veinlets almost atrophied at their origin, the first connected with the subcostal veinlet, the latter with the third median veinlet by a very short disco-cellular; the discal veinlet itself almost atrophied, running nearly parallel and immediately in front of the median; third median veinlet much bent at its origin. Hind wings subovate; costal vein long; subcostal ending only in two veinlets; upper disco-cellular veinlet wanting; discal vein distinct

and simple throughout its whole course to the outer margin, with a slight bend at its junction with the short disco-cellular which connects it with the median veinlet: bristle in the male simple, retained by a corneous retinaculum arising from the hind side of the subcostal vein, compound in the female, retained by a bunch of scales arising from the fore side of the median vein. Fore legs short; tibiæ with a strong sharp spine about the middle; first joint of the tarsi about the same length as the tibiæ, the four rest equal in length to the first. Middle legs with the tibiæ about two-thirds the length of the tarsi, bispinose at the tips; first joint of the tarsi nearly equal to all the rest. Hind legs with the tibiæ about two-thirds the length of the tarsi, bispinose at the tips and furnished also with two spines beyond the middle; first joint of the tarsi longer than the rest combined. Claws of all the tarsi simple; tarsi spinose. Abdomen cylindrical, arched in the male, tufted at its tip, in the female tapering to a point."—*Doubleday*.

Group 1.

Club of the antennæ rounder and less mucronate than in the second group, and apparently also destitute of the tuft of scales at the point.

1. SYNEMON SOPHIA.

Nigro-fusca; *alæ subtus luteæ fasciis ramosis nigris*; *anticæ supra nigro-fusca cinereo variæ*; *posticæ nigræ vittis tribus macularibus luteis*.

Hesperia? *Sophia*, *White, Grey's Exped. Austral. Append.* 474, f. 7. *Synemon Sophia*, *Doubleday, Lort's Discov. Austral. Append.* i. 516, pl. 3, f. 5.

"Fore wings of the male brown, clouded with gray and fuscous-brown, a dark cloud near the base, another at the end of the discal areolet followed by a white dot, the veins grayish-white. Hind wings black at the base with an oval yellow spot, a macular yellow band beyond the middle, followed by a series of yellow spots. Cilia yellowish towards the anal angle. Head grayish. Antennæ black, varied with white. Thorax gray. Abdomen black at the base, whitish beyond. Female with the fore wings nearly black, clouded with light bluish-gray scales, arranged on the margin into a band divided by a series of black spots; areolet with a white dot at the tip; a short macular band beyond the areolet commencing on the

costa. Hind wings black, with a large orange spot near the base, followed by a broad, abbreviated, transverse band, commencing on the abdominal margin and succeeded by a large rounded spot of the same colour; a series of three or four orange spots between these and the outer margin. Head dark gray. Palpi nearly white. Antennæ black, with white rings. Abdomen pale fulvous. Length of the wings 22 lines."—*Doubleday*.

a. New Holland. Presented by the late Earl of Derby.

b, c. King George's Sound. Presented by Capt. Geo. Grey.

2. SYNEMON THERESA.

Nigro-fusca; alæ subtus fulvæ fusco testaceoque maculatæ, anticæ fusæ, cinereo strigatæ; posticæ fulvæ, basi fusæ, posticæ vitta maculari margineque nigro-fuscis. ●

Synemon Theresa, *Doubleday, Lort's Discov. Austral. Append. i.* 517, pl. 3, f. 6.

"Fore wings above grayish, the disk varied with longitudinal pale and fuscous dashes, beyond the middle the pale dashes almost form a transverse band, followed by a series of dark spots, margin brown slightly varied with white; cilia gray. Hind wings fulvous-brown at the base, marked with a clear fulvous spot, beyond this, fulvous with a transverse macular band, the margin itself black; cilia gray. Fore wings orange beneath, with the outer margin narrowly black; three or four black spots before the apex. Hind wings beneath grayish in the male, in the female nearly as above, but paler. Head, thorax, and abdomen gray above, whitish beneath. Antennæ black, with white rings. Hind wings of the male of a somewhat castaneous hue above, less clearly marked than those of the female."—*Doubleday*. Length of the wings 18 lines.

a—c. New Holland. Presented by the Entomological Club.

d. New Holland. From Mr. Pamplin's collection.

e. New Holland. From Mr. Strange's collection.

f—h. New Holland.

3. SYNEMON MOPSA.

Nigro-fusca; alæ subtus fulvescentes maculis testaceis; anticæ supra fusæ fasciis duabus obliquis strigosis albidis; posticæ fulvæ vittis duabus macularibus fuscis.

Synemon Mopsa, Doubleday, *Lort's Discov. Austral. Append.* i. 518, pl. 3, f. 7.

"Fore wings pale fuscous or brownish, with two white dashes at the base, the discal areolet with a white spot, beyond the areolet a transverse macular white band, in which are a series of fuscous spots; the margin slightly shaded with pale gray. Hind wings light chesnut-brown, with some fuscous clouds towards the outer margin. Wings beneath light brown, fore wings rather fulvescent, all with some darker clouds. Head, thorax, and abdomen gray above, paler beneath. Antennæ black, with white rings."—*Doubleday*. Length of the wings 15 lin.

- a. South Australia. Presented by the Haslar Hospital.
- b. South Australia. Presented by the Entomological Club.
- c. South Australia. Presented by the late Earl of Derby.

4. SYNEMON LETA.

Nigro-fusca, subtus albida; antennæ albo annulatæ; alæ anticae fuscae, albido conspersæ, maculis duabus fasciæque apicali maculari nigro-fuscis, subtus aurantiacæ fusco maculatæ; posticæ aurantiacæ, macula basali fasciisque duabus nigris, subtus albo guttatæ.

Blackish brown, whitish beneath. Antennæ with white rings. Fore wings brown, sprinkled with whitish atoms; two large irregular dark brown spots in each disk, the larger one nearer the base, a whitish mark between it and the smaller one which has another whitish mark beyond it; a macular dark brown band along the apical border; under side orange with dark brown spots nearly corresponding to those above, the white marks more clear. Hind wings orange, with a black spot near the base, and with two black bands; the first band in the disk, curved, irregular; the second marginal and containing a row of orange spots; under side with some white dots and with dark brown marks nearly corresponding to those above. This species has narrower wings than *S. Sophia*, to which, however, it is more allied than are the two preceding species. Length of the body 10 lines; of the wings 20 lines.

- a. Australia. From the voyage of H. M. S. Rattlesnake.
- b. Australia. From Mr. Strange's collection.

5. SYNEMON PLANA.

Fœm. *Fusca, subtus alba; antennæ nigro-fuscæ, non annulatæ; alæ anticæ maculis duabus magnis discalibus serieque punctorum apicalium obscure fuscis, subtus apice fusco biguttatæ et testaceo unifasciatæ; alæ posticæ flavæ, fusco quadriguttatæ et marginatæ.*

Fem. Brown, white beneath. Antennæ blackish-brown, not annulated. Oviduct tawny. Fore wings with two large dark brown spots in the disk, and with a row of small dark brown spots along each tip; under side white, with two brown dots in the disk near the tip along which there is a slender testaceous band. Hind wings yellow, with four small brown spots forming a short much interrupted band across the disk, and with a slender brown hind border; under side white, with the brown dots more or less distinct. Length of the body 8, 9 lines; of the wings 14, 16 lines.

a. Australia. From Capt. Parry's collection.

b. Australia. From Mr. Pamplin's collection.

Genus 7. CORONIS.

Corpus vix crassum. Antennæ rectæ, ultra medium subincrassatæ, apice acuminatæ. Alæ posticæ subcaudatæ.

Coronis, Latr. Cuv. *Règne Anim.* v. 389; *Boisd.*; *Guér.*; *Blanch. Hist. Nat. Ins.* ii. 350; *Crochard, Chenu, Enc. d'Hist. Nat. Pap.* 234.

Phalæna, p., *Cramer.*

Agarista, p., *Godart.*

This genus has some resemblance to the *Nymphalidæ*.

1. CORONIS ORITHEA.

Nigro-fusca; alæ albido marginatæ, subtus basi testaceæ; anticæ vittis duabus obliquis, una sub-basali angulata rufescente-albido marginata, altera discali alba intus dentata; posticæ supra fascia lata cyanea postice rufescente attenuata ocellisque caudalibus.

Phalæna Orithea, *Cram. Pap. Exot.* iii. 121, pl. 262, f. C. D.

Coronis D'Urvillii, *God. Enc. Mèth.* ix. 803. *Latr. Cuv. Règne Anim.* v. 389, pl. 20, f. 4.

Surinam.

a, b. Brazil. From Mr. Argent's collection.

2. CORONIS EGINA.

Nigro-fusca; alæ marginibus fusco-testaceis, subtus pallidiores; anticæ lineis undulatis transversis pallidioribus fasciisque tribus albidis, 1a et 2a sub-basalibus, 3a discali latiore; posticæ fascia lata obliqua subundulata rufa ocellisque caudalibus.

Coronis Egina, *Boisd. Croch. ed. Règne Anim. Atlas, Ins.* pl. 145, f. 4.

a. Brazil. Presented by W. C. Hewitson, Esq.

3. CORONIS JAPET.

Nigro-fusca; alæ subtus basi fulvo-testaceæ; anticæ lineis undulatis transversis pallidioribus fasciæque recta discali integra alba, aut albido-testacea; posticæ fascia undulata obliqua lutea, macula marginali lutea aut alba, ocellisque caudalibus.

Coronis Japet, *Boisd. Croch. ed. Règne Anim. Atlas, Ins.* pl. 145, f. 3. *Chenu, Enc. d'Hist. Nat. Pap.* 234, f. 400.

Brazil.

a, b. Venezuela. From Mr. Dyson's collection.

4. CORONIS INTERLINEATA.

Fusca, subtus testacea; antennæ fulvæ; alæ anticæ lineis obscurioribus et pallidioribus transversis undulatis alternis quatuorque distinctioribus albidis; posticæ fascia obliqua lutea, subtus fusco trifasciatæ.

Brown, with paler hairs. Body and wings testaceous beneath. Antennæ tawny. Fore wings with alternate dark and pale brown transverse undulating lines, and with four more distinct whitish lines; first and second towards the base very angular; third broader, undulating; fourth marginal, angular; under side with a brown

spot and with two brown bands, the first undulating and discal, the second apical, angular externally. Hind wings with an undulating oblique luteous band which is testaceous hindward, and with caudal ocelli; under side with three imperfect oblique brown bands. Length of the body 10 lines; of the wings 29 lines.

a. ——— ?

5. CORONIS SUBPICTA.

Nigro-fusca; alæ anticæ lineis transversis undulatis obscurioribus et pallidioribus alternis fasciæque nigro-fusca, subtus basi testaceo fasciisque duabus albido-testaceis; posticæ fascia brevi obliqua undulata lutea, postice ferrugineæ lineis obliquis angulatis fuscis.

Dark brown. Fore wings with alternate dark and pale brown transverse and undulating lines, with a blackish brown spot near the fore border at one-third of the length, and with a blackish brown undulating band a little beyond the middle; under side testaceous for more than one-third of the length from the base and including a brown dot, and with two whitish testaceous bands, the first discal, the second apical; between the two in front are some short undulating streaks. Hind wings with a short oblique undulating luteous band and with a luteous spot on the opposite outer border; hinder half ferruginous with angular oblique brown lines and with caudal ocelli; under side testaceous for near half the length from the base, with a blackish brown and a yellow oblique band; hinder third part red with a streaky black band and with some yellow marks. Length of the body 11 lines; of the wings 34 lines.

a. Venezuela. From Mr. Dyson's collection.

6. CORONIS LEACHII.

Nigro-fusca; alæ lineis transversis undulatis pallidioribus, fasciæque recta alba in anticis discali in posticis marginali; anticæ strigis anticis subapicalibus rufescentibus, subtus basim versus pallidiores, gutta costali nigro-fusca; posticæ ocellis caudalibus, subtus linea transversa valde undulata testacea apud venas albida.

Coronis Leachii, *God. Enc. Méth.* ix. 803. *Guér. Icon. Règne Anim. Ins.* pl. 83, f. 3. *Boisd. Spec. Gen. Lep.* i. pl. 14, f. 2.

a. Mexico. From M. Hartweg's collection.

7. CORONIS EVENUS.

Nigro-fusca ; antennæ *fulvæ* ; alæ *anticæ ferrugineo-fuscae lineis transversis undulatis obscurioribus, fasciæque latissima indentata nigro-fusca aut nigro-fusca marginata, subtus gutta obscuriore fasciisque duabus testaceis* ; posticæ *nigro-fuscae, linea brevi externa alba, strigis undulatis posticis ferrugineo-fuscis ocellisque caudalibus, subtus ferrugineo-fuscae linea undulata obscuriore apud venas albo guttata.*

Coronis Evenus, *Boisd. Croch. ed. Règne Anim. Atlas, Ins. pl. 145, f. 2. Chenu, Enc. d'Hist. Nat. Pap. 234, f. 401.*

C. Leachii, var. ?

Colombia.

a, b. Venezuela. From Mr. Dyson's collection.

Genus 8. AGARISTA.

Corpus sat longum, vix crassum. Palpi longi, caput facile superantes, articulis 1o et 2o depressis pilosis, 3o longo gracili cylindrico fere glabro, apice conico. Antennæ corpore paullo breviores, apices versus subincrassatæ, arcuatæ, apice acuminatæ. Alæ rotundatæ, sat magnæ ; posticæ areola discali clausa. Pedes sat robusti ; tibiæ anticæ conicæ, intermediæ apice fortiter bispinosæ, posticæ supra et apice bispinosæ ; tarsi infra subciliati, articulis subæqualibus.

Agarista, *Leach, Zoolog. Miscell. i. 37; God. ; Guér. ; Boisd. ; Feisth. ; Blanch. Hist. Nat. Ins. ii. 350 ; Chenu, Enc. d'Hist. Nat. Pap. 235 ; Croch.*

Papilio, p., *Donov.*

Phalænoides, *Lewin.*

1. AGARISTA AGRICOLA.

Atra ; caput albo guttatum ; thorax pallide flavus ; alæ albo marginatæ ; alæ anticæ fasciis duabus macularibus obliquis luteis, maculisque apicalibus biserialim posticisque tribus subcyaneis ; posticæ fascia antica obliqua cyanea alteraque postica rufa ; abdomen apice luteum.

Papilio agricola, *Donovan, Illustr. Ins. Austral. Lepid. pl.*

Agarista picta, *Leach, Zool. Miscell. i. pl. 15. Godart, Enc. Méth.*

ix. 803. *Boisd. Voy. de l'Astrolabe*, Pt. 1, *Lep.* 172, 1. *Feisthamel, Voy. de la Favorite*, v. *Suppl.* 21. *Duncan, Nat. Libr.* xxxviii. *Exotic Moths*, 83, pl. 2, f. 1.

- a. New Holland. Presented by the late Earl of Derby.
- b, c. New Holland. From Mr. Children's collection.
- d, e. New Holland. From Mr. Milne's collection.
- f. New Holland.

2. AGARISTA FRONTINUS.

Nigra ; caput et thorax fulva ; alæ albo marginatæ ; anticæ fascia dentata alba.

Papilio Frontinus, Donovan, Illustr. Ins. Austral. Lepid.

Agarista Frontinus, Boisd. Voy. Duperrey, Zool. ii. 282 ; *Voy. de l'Astrolabe*, Pt. 1, *Lep.* 173, 2.

Noctua scapularis, Guérin, Voy. Duperrey, Atlas, Ins. pl. 19, f. 2.

New South Wales.

3. AGARISTA OSTORIUS.

Nigro-fusca ; thorax albo bifasciatus ; abdominis segmenta flavo fasciata ; alæ albo marginatæ, anticæ vitta abbreviata basim versus furcata fasciæque media albis, posticæ flavo bimaculatæ.

Papilio Ostorius, Donovan, Illustr. Ins. Austral. Lepid.

Agarista Ostorius, Boisd. Voy. de l'Astrolabe, Pt. 1, *Lep.* 173, 3.

New South Wales.

4. AGARISTA LATINUS.

Nigro-fusca ; caput, thorax, pedes et alæ anticæ basi albo guttata ; abdomen apice luteum ; alæ anticæ fascia excavata post media apiceque flavis, lineæque transversa e guttis subapicalibus albis ; posticæ margine postico flavo nigro guttato.

Papilio Latinus, Donovan, Illustr. Ins. Austral. Lepid.

Agarista Latinus, Boisd. Voy. de l'Astrolabe, Pt. 1, *Lep.* 174, 4. *Feisthamel, Voy. de la Favorite*, v. *Suppl.* 21.

- a. New Holland. Presented by the late Earl of Derby.
 b. Van Dieman's Land. Presented by R. Butler, Esq.
 c, d. New Holland. From Mr. Milne's collection.
 e. New Holland. From Mr. Children's collection.
 f. New Holland.

5. AGARISTA GLYCINÆ.

Nigro-cuprea; caput et thorax flavo vittata; alæ anticæ basi lineis transversis subviridibus, macula et fascia excavata discalibus et nonnunquam strigis subapicalibus flavis; alæ posticæ flavo marginatæ; abdomen fasciis subtus apiceque croceis; pedes croceo-hirti, albo guttati.

Larva cinerea subpilosa strigis transversis interruptis nigris, segmento ultimo ferrugineo, capite segmentoque 1o ferrugineis nigro punctatis.

Phalænoides Glycinæ, Lewin, Nat. Hist. Lep. Ins. New South Wales, 2, pl. 1.

Agarista Glycinæ, Boisd. Voy. de l'Astrolabe, Pt. 1, Lep. 175, 5; Spec. Gen. Lep. i. pl. 14, f. 3. Feisthamel, Voy. de la Favorite, v. Suppl. 21. Guér. Icon. Règn. Anim. Ins. pl. 83, f. 2. Croch. ed. Règn. Anim. Atlas, Ins. pl. 144, f. 4.

- a. New Holland. Presented by the late Earl of Derby.
 b—d. New Holland. From Mr. Children's collection.
 e, f. New Holland. From Mr. Milne's collection.

6. AGARISTA EPHYRA.

Nigro-cuprea; alæ anticæ guttis basalibus, maculis subquadratis quinque ante mediis fascia arcuata abbreviata post media, guttisq. subapicalibus biserialiter dispositis pallide flavis; alæ posticæ macula arcuata discali maculisque marginalibus pallide flavis; abdomen guttis lateralibus pallide flavis, apice luteum. Long. 7—9; alar. 19—22 lin.

Agarista Ephyra, MSS.

- a—c. Van Dieman's Land. Presented by Maj. Gen. Hardwicke.
 d, e. Van Dieman's Land. Presented by R. Butler, Esq.
 f, g. Van Dieman's Land. Presented by J. G. Children, Esq.
 h. Van Dieman's Land.

7. AGARISTA LEWINII.

Nigro-cuprea, præcedente major, gracilior; alæ anticæ guttis basilibus, maculis subquadratis quatuor aut quinque ante mediis fascia arcuata abbreviata post media guttisque subapicalibus biseriatim dispositis pallide flavis; posticæ maculis marginalibus et nonnunquam una discali subobsoleta pallide flavis; abdomen guttis lateralibus pallide flavis, apice luteum. Long. 9—10; alar. 22—24 lin.

Agarista Lewinii, Boisd. Voy. de l'Astrolabe, Pt. 1, Lép. 176, 6.

Very nearly allied to *A. Ephyra*, but the body is longer and more slender, the wings are more ample, and their spots are fewer and generally smaller.

a—c. New Holland. From Mr. Children's collection.

d, e. New Holland. From Mr. Milne's collection.

f. New Holland.

8. AGARISTA DONOVANI.

Anus ferrugineus; alæ nigro-fuscæ, concolores, subtus basi flavescente radiatæ; anticæ punctis sex albis; posticæ fascia transversa flava.

Var.? *Nigro-fusca, cyanescens; caput et thorax albo fasciata; abdomen flavo fasciatum, apice luteum; alæ marginibus posticis albo guttatis, anticæ maculis quatuor vel sex subquadratis flavis subtus albis, posticæ vitta flava.*

Agarista Donovanii, Boisd. Voy. de l'Astrolabe, Pt. 1, Lép. 176, 7.
Feisthamel, Voy. de la Favorite, v. Suppl. 22.

a—c. New Holland. From Mr. Milne's collection.

d. New Holland.

9. AGARISTA AFFINIS.

Nigro-cuprea; caput et thorax flavo-albo guttata; abdomen flavo-albo fasciatum, apice luteum; alæ anticæ dimidio basali flavo-albo guttata, fascia subobliqua lineaque e guttis transversa subapicali flavo-albis; posticæ flavo-albo marginatæ, subtus cyaneo guttatæ; pedes albido guttati; tibiis posticis luteo-artis.

Agarista affinis, Boisd. Voy. de l'Astrolabe, Pt. 1, Lep. 177, 8.

- a. Sidney. From Mr. Lambert's collection.
 b, c. New Holland. From Mr. Milne's collection.
 d. New Holland. From Mr. Children's collection.
 e, f. New Holland. Voyage of H. M. S. Rattlesnake.

10. AGARISTA HÆMORRHOIDALIS.

Alæ nigro-fusæ; anticæ lineis duabus basilaribus, fasciolisque mediis duabus abbreviatis, plumbeis, maculaque externa albidâ; posticæ fascia flava; omnes subtus concolores; prothorax et anus ferruginei.

Agarista hæmorrhoidalis, *Boisd. Voy. Duperrey, Zool.* ii. 283; *Atlas, Ins.* pl. 19, f. 1; *Voy. de l'Astrolabe, Pt. 1, Lép.* 177, 9.

New Ireland.

11. AGARISTA LEONORA.

Cyaneo-atra; caput et thorax albo fasciata; abdomen apice croceum; alæ apice margineque postico albo guttatis; anticæ strigis transversis cæruleis (una postica arcuata) maculisque albidis; posticæ vitta abbreviata albida; pedes croceo-hirti, albo guttati.
 Long. 8—9; alar. 21—24 lin.

Agarista Leonora, *Doubleday, Appendix to Lort's Discoveries in Australia*, i.

"Wings purplish-black, fore wings with a short bluish-white striga close to the base, followed at a short distance by a second curved one, united to the first by a vitta of the same colour, extending along the radial vein; a white spot towards the extremity of the discal areolet followed by three smaller, not always well defined ones, on the costa below, and a little beyond these are four generally more distinct spots, of which the third from the costa is largest, these are followed by a slightly flexuous and bluish-white macular striga, beyond which is a series of from three to five spots of the same colour. Near the anal angle is a round bluish spot, preceded, in part surrounded by a semicircle of the same colour, between which and the second transverse striga is an irregular spot, also bluish. Hind wings with a macular band, not extending to the fore border. Cilia of all the wings white, spotted except at the tips of the fore wings with black. Under side purplish-black, the base of all the wings slightly marked with bluish, the fore wings with a distinct spot near the extremity of the discal areolet, and a macular white band beyond the middle, beyond which near the costa is a bluish spot. Hind wings with a band corresponding to that above, connected with the outer border by a less distinct bluish-white band.

Head yellow-white. Forehead, vertex and antennæ black. Thorax black, with two transverse lines in front and the sides behind yellowish. Legs black, spotted with white, densely clothed with fulvous hairs at the base of the coxæ. Abdomen black; last segment bright fulvous. Female with markings rather more blue than in the male." —*Doubleday*. Length of the wings 21 lines.

a, b. Port Essington. From Mr. Gould's collection.

c—e. New Holland. Presented by the late Earl of Derby.

12. AGARISTA NOVÆ HIBERNIÆ.

Anus fulvus; alæ nigræ, subtus fasciis chalybeis micantibus; antica apice maculaque albis, punctis maculisque sparsis chalybeis micantibus; posticæ basi late chalybea-micante.

Agarista Novæ Hiberniæ, Boisd. Voy. de l'Astrolabe, Pt. 1, Lép. 128, 10.

New Ireland.

Var. ? *Cupreo-nigra; caput, pedes thoracisque vitta alba; abdomen canum, subtus apiceque luteum; alæ apice margineque postico albo variæ; antica cyaneo guttatæ, posticæ basim versus subcæruleo-albidæ, fasciæque discali abbreviata subarcuata extus tridentata albida, dimidio basali subtus e maculis cyaneis arcuatim vittato.*

Very nearly allied to *A. Leonora*, but more slender; the markings of the same colour, but differently arranged. Length of the body 7 lines; of the wings 10 lines.

a. New Holland, Presented by the late Earl of Derby.

13. AGARISTA PRASLINI.

Thorax transversim flavescens strigatus; alæ antica nigro-cyanæ, puncto medio, fasciis abbreviatis costalibus, posticis, internisque flavescens; posticæ fusæ; margine late flavescens.

Agarista Praslini, Boisd. Voy. de l'Astrolabe, Pt. 1, Lép. 179, 11.

Port Praslin, New Ireland.

14. AGARISTA ? MEGISTO.

Alæ antica fusæ micantes, venis albidis fasciisque duabus albis; posticæ fusæ fimbria alba.

Agarista? Megisto, *Boisd. Voy. de l'Astrolabe*, Pt. 1, *Lep.* 179, 12.
Atlas, Lep. pl. 5, f. 5.

Dorey, New Guinea.

Genus 9. EUSEMIA.

Corpus gracile. Caput parvum. Oculi mediocres. Lingua brevis. Palpi porrecti, basi pilosi; articulus 2us 1o paullo longior; 3us conicus, brevissimus. Antennæ graciles, corpore multo breviores, ante apices subincrassatæ, apud apices attenuatæ subhamatæ. Abdomen cylindricum, pone alas terminatum, apice maris fasciculatum fœm. subattenuatum. Alæ anticæ sat longæ, subtrigonæ, margine externo subconvexo; posticæ vix latiores, multo breviores.

Eusemia, *Dalman, Vet. Acad. Handl.* 1824.

1. EUSEMIA BELLATRIX.

Caput albo maculatum; thorax antice sulphureo maculatus; abdomen nigro et sanguineo fasciatum; alæ anticæ nigræ, basi maculis majoribus pallide cæruleis, fascia late ante, maculisque duabus minoribus pone medium sulphureis punctisque nonnullis albis inter has et marginem apicalem; alæ posticæ nigræ maculis tribus albis pone medium alterisque duabus sanguineis ad angulum analem. Long. alar. fere 39 lin.

Eusemia Bellatrix, *Westw. Cab. Orient. Ent.* pl. 33, f. 2.

Assam.

a. North Bengal. Presented by W. W. Saunders, Esq.

b, c. North India. From Mr. L. James' collection.

d. East Indies. From Archdeacon Clerk's collection.

e. Ceylon. Presented by R. Templeton, Esq.

f. Nepal.

2. EUSEMIA DENTATRIX.

Caput, prothorax et femora antica fulva; thorax niger, abdomen fulvum, nigro fasciatum; alæ anticæ nigræ, maculis nonnullis ad alarum basim margineque apicali acute dentata cæruleis, maculis duabus majoribus quadratis ante medium alterisque duabus albis pone medium; alæ posticæ fulvæ, basi, macula magna discali postice dentata et cum costa connexa margineque postico late nigris. Long. alar. 38½ lin.

Eusemia dentatrix, *Westw. Cab. Orient. Ent.* 68, pl. 33, f. 5.

a. Nepal. Presented by Major General Hardwicke.

3. EUSEMIA LECTRIX.

Nigra; caput albo guttatum; thorax flavo quadrivittatus; abdominis segmenta rufo fasciata; alæ anticæ guttis basalibus cyaneis subapicalibus albis, fasciisque duabus obliquis plus minusve interruptis flavis; posticæ rufæ fascia maculari nigra, margine late nigro-albo guttato.

Phalæna Noctua Lectrix, *Linn. Syst. Nat.* 834, 89; *Mus. Lud. Utr.* 389. *Edw. Aves*, pl. 318. *Houttuin, Hist. Nat.* i. xi. 598, pl. 92, f. 5.

Bombyx Lectrix, *Fabr. Sp. Ins.* ii. 201, 132; *Mant. Ins.* ii. 130, 185; *Ent. Syst.* iii. i. 475, 212.

Phalæna Bombyx Lectrix, *Gmel. ed. Syst. Nat.* i. 5, 2442, 89. *Cram. Pap. Exot.* ii. 146, pl. 192, f. C. *Donov. Ins. China*, pl. 43, f. 2.

Eusemia Lectrix, *Duncan, Nat. Libr. xxxvii. Exotic Moths*, 86, pl. 2.

China.

a, b. China? From Mr. Milne's collection.

c, d. China?

4. EUSEMIA MACULATRIX.

Var. *Caput albo maculatum*; thorax antice stramineo maculatum; abdomen fulvo nigroque cinctum; alæ anticæ nigræ basi cæruleo maculatæ, puncto stramineo approximato maculis quatuor discalibus, duo majoribus, duo minoribus, stramineis, et pone has maculis septem albis 6a minuta; posticæ fulvo-rufæ basi costa macula angulata costali fimbria irregulari (in qua 1 vel 2 maculæ albæ) maculaque magna discali cum margine anali connexa, lineisque duabus ad fimbriam extensis, nigris. Long. alar. 42 lin.

Eusemia maculatrix, *Westw. Nat. Library, xxxvii. Exot. Moths*, 88. *Cab. Orient. Ent.* 67, pl. 33, f. 1.

Var.? Discal spots on the fore wings yellow, forming two more evident fasciæ; fimbria of the hind wings with a regular series of submarginal white spots.

Eusemia fasciatrix, *Westw. Cab. Orient. Ent.* 67.

Var. a. Thorax with a broad yellow stripe on each side in front. Fore wings with several blue spots at the base, and with three macular white bands; the first of two large subquadrate spots; the second of five spots, four of them forming two pairs, the hindmost one single; the third of five spots. Hind wings luteous with a deep black border which is much widened at the tips, and with two black spots, one on the fore border the other on the disk and extending to the inner border and connected with the hind border by three black bands, of which the middle one is much broader than the other two; three white spots on the hind border. Has much resemblance to *E. lectrix*.

Var. β. Like var. a.; first band of the fore wings yellow, the spots almost connected, as are also the pairs of spots in the second band. Hind wings with two black bands between the discal spot and the hind border, which contains only two white spots. Silhet.

Var. γ. Like var. β. Fore wings with the second bands composed of three spots, of which the first and second are yellow. Hind wings reddish, with only one black band between the discal spot and the hind border. Silhet.

Var. δ. Like var. β. Hind wings luteous, with two black bands between the discal spot and the hind border which contains four white spots.

Var. ε. Like var. a. Thorax with a white spot on each side in front instead of the stripes. Fore wings with the blue spots less conspicuous; first band entire; second composed of four spots, of which the second forms a short band. Hind wings reddish, more black at the base, but less so at the tips; fore spot larger and more angular; discal spot emitting one band. There are many varieties intermediate between this and the following.

Var. ζ. Like var. ε. Fore wings with pale luteous bands, of which the first is entire; the second is formed by three spots, of which the second forms a short curved band, and the third is a dot. Hind wings with only one pale luteous dot on the black border near the tip.

Var. η. Like var. a. Fore wings with two macular bands, the first composed of two yellow spots, the second of six rather large elongated subfusiform white spots. Hind wings red; fore spot angular; discal spot emitting two black bands to the hind border which contains three white dots. Java. This differs much from all the preceding vars. in the structure of the second band of the fore wings,

and in having no third band, and may be a distinct species, or they may all be merely local varieties of *E. lectrix*.

- a—c.* Silhet. Presented by E. Doubleday, Esq.
d, e. Silhet. From the Rev. J. Stainforth's collection.
f—i. Silhet. From Mr. Sowerby's collection.
j. North India. From Mr. L. James's collection.
k, l. Assam. From Mr. Warwick's collection.
m. Java. Presented by the Entomological Club.
n. Java. From the East India Company's collection.
o, p. Java. From Mrs. Henry's collection.
q, r. Nepaul.
s—v. ——— ? From Mr. Children's collection.

5. EUSEMIA AMATRIX.

Caput, prothorax et pedes fulva; thorax niger; abdomen fulvum, nigro fasciatum; alæ anticæ nigrae, certo situ purpureæ, maculis cæruleis ante et pone medium tinctis costa tenui fulva, maculis tribus majoribus stramineis prope medium, maculisque quatuor parvis ovalibus albis inter medium et apicem; alæ posticæ læte fulvæ, basi macula prope costam margineque lato apicali nigris; alæ quatuor cilia ad angulum apicalem alba.
 Long. alar. 33 lin.

Eusemia amatrix, Westw. *Cab. Orient. Ent.* 68, pl. 33, f. 4.

Assam.

Var. a. Nigro-fusca; caput et thorax subtus testaceo-hirta; abdomen fulvum, apice nigro-fuscum; alæ anticæ fascia abbreviata subobliqua flava; posticæ luteæ, basi margineque lato nigro-fuscis.

Eusemia Belangerii, Guérin, *Voy. de Belanger, Atlas, Ins.* pl. 5, f. 3.

Var. β. Alæ anticæ fascia interrupta maculaque transversa flavis.

Eusemia amatrix, Westw.

The band is a little nearer the base of the wing than in *Var. a.* and the spot is parted by about twice its breadth from the band.

- e—d.* Java. From Mrs. Henry's collection.
e. Java. From Mr. Children's collection.
f. Java. From the East India Company's collection.

6. EUSEMIA PROXIMA.

Nigro-fusca ; caput et thorax subtus fulvo-hirta ; abdomen luteum, basi apiceque nigro-fuscum ; alæ anticæ linea costali fulva, fascia abbreviata subobliqua maculaque transversa flavis ; posticæ luteæ, basi margineque postico lato nigro-fuscis.

Nearly allied to the preceding species, but the fore wings are rather longer, narrower, and more pointed towards the tips, and there is a tawny line along the fore border of the fore wings. Fore wings slightly bluish towards the base beneath. Length of the body 11—12 lines ; of the wings 28—30 lines.

a, b. Assam. From Mr. Warwick's collection.

7. EUSEMIA CONTIGUA.

E. Euphemia affinis, nigro-fusca ; caput et thorax albo guttata, subtus testaceo-hirta ; abdomen ferrugineum, segmentorum marginibus posticis testaceis ; alæ anticæ apice albæ, cyaneo strigatæ, flavo bifasciatæ et biguttatæ ; posticæ rufæ, nigro marginatæ, margine subtus albo radiato.

Nearly allied to *E. Euphemia*, but the dots on the thorax are longer and like interrupted stripes, the bands on the abdomen are much narrower and paler, the blue streaks on the fore wings are not interrupted, and the yellow marks on the same are differently formed and situated ; the bands are abbreviated, the first is oblique, the second nearly upright ; one yellow dot is near the fore border, about equally distant from each band, the second is near the hind border and a little nearer the base than is the second band. Length of the body 9 lines ; of the wings 24 lines.

a. ——— ? From Mr. Milne's collection.

8. EUSEMIA EUPHEMIA.

Nigra ; caput, thorax, abdomen subtus, pedes, et nonnunquam alæ anticæ basi albo guttata ; abdominis segmenta fulvo fasciata ; alæ anticæ cyaneo strigatæ, apice albæ, maculis 6 vel 5 flavis ; posticæ rufæ nigro marginatæ.

Phalæna Euphemia, Cram. Pap. Exot. iv. 105, pl. 345, f. A.
Senegal. Amboina.

Var. α . Thorax with four yellow spots in front. Fore wings with six yellow spots, the first pair oblong, one on each border, that on the fore border interrupted longitudinally; the second pair large, subquadrate; the fore one of the third pair forming a short band which is much indented on the hind part of the inner side, the hind one small, subquadrate.

Var. β . Like Var. α . The hind spot of the first pair interrupted transversely.

Var. γ . Fore wings with five spots, the first on the disk near the base, the second and third in the middle nearly connected, the fourth forming a short band, but hardly interrupted on the inner side, the fifth forming a dot near the hind border.

Var. δ . Fore wings with six yellow spots, the first pair transverse, at some distance from the base, near which there is a yellow dot, the second pair somewhat rounded, the fifth very large, nearly oval, the sixth rather small.

Var. ϵ . Hind wings yellow, with black borders.

a, b. Zoolu Country, S. Africa. Presented by G. F. Angas, Esq.

c, d. Port Natal. From M. Gueinzus' collection.

e. Congo. Presented by Sir J. Richardson.

f. Ashanti. From the collection of the Wesleyan Missionary Society.

g. Guinea.

h. ———? From Mr. Leadbeater's collection.

9. EUSEMIA LONGIPENNIS.

Nigra, antice albo guttata; abdomen testaceum, apice fuscum; alæ apice albæ; anticæ basi cyaneo alboque guttatæ, maculis duabus sub-basalibus fasciisque duabus macularibus testaceis; posticæ rufæ aut luteæ, nigro marginatæ; pedes albo vittati.

Male. Black. Head and fore part of the thorax with white dots. Abdomen testaceous, brown at the tip. Wings white at the tips. Fore wings with some blue and white dots at the base, with two testaceous spots towards the base, and with two macular testaceous bands; the first spot is very small and in front; the second is large, subfusiform, and extends along the hind border; first band composed of three spots, of which the first and second are large subquadrate and near together, the third is smaller and very near the hind border; the second band

comprises four almost contiguous spots. Hind wings pale red, with a broad black border. Legs with white stripes. Length of the body 13—15 lines; of the wings 42—47 lines.

Var. β . First spot of the fore wings wanting. Hind wings pale luteous with a red stripe in front.

a. West Africa. Presented by E. Doubleday, Esq.

b. Ashanti. From the collection of the Wesleyan Missionary Society.

10. EUSEMIA PALLIDA.

Nigra, antice albo guttata; abdominis segmenta testaceo fasciata; alæ apice albæ; anticæ basi cyaneo guttatæ, maculis duabus sub-basalibus fasciisque duabus macularibus testaceis; posticæ testaceæ nigro marginatæ; pedes albo vittati.

Male. Black. Head and fore part of the thorax with white dots. Abdomen brown, with a testaceous band on the hind border of each segment. Wings white at the tips. Fore wings with blue dots at the base, with two testaceous spots towards the base, and with two macular testaceous bands; the first spot is very small, and in front; the second is linear, and extends along the hind border; first band composed of three spots, of which the first and second are larger and nearer together than is the third; second band composed of two spots which are subdivided. Hind wings testaceous, with a black border. Legs striped with white. Length of the body 11 lines; of the wings 36 lines.

Much resembles the preceding species, but the fore wings are broader and much shorter, and form a less oblique angle on the hind border. The black margin of the hind wings is narrower, especially behind, and its inner border is even, not angular or undulating as in *E. longipennis*.

a. ——— ?

11. EUSEMIA VICTRIX.

Nigra, abdominis segmento apicali femoribusque anticis fulvis; alæ anticæ macula transversa basali, fimbriaque dentata marginis apicalis purpureis, fascia lata straminea ante medium maculisque tribus parvis albis pone medium; posticæ fimbria lata purpurea. Long. alar. 39 lin.

Eusemia victrix, Westw. *Cab. Orient. Ent.* pl. 33, f. 3,

- a. Silhet. Presented by E. Doubleday, Esq.
- b. Silhet. From Mr. Argent's collection.
- c. Himalayan Mountains. From Mr. Leadbeater's collection.
- d. Nepaul.

12. EUSEMIA BASALIS.

Nigro-fusca; abdomen luteum, basi apice fasciisque nigro-fuscis; alæ anticæ cyaneo strigatæ, macula basim versus fasciaque abbreviata excavata albis; posticæ macula postica basim versus lutea alteraque discali alba.

The white spots are nearly round, the band is upright, and is indented in the middle of the inner side; the luteous spot is angular, and is larger than the white spots. Length of the body 9 lines; of the wings 26 lines.

- a. Bengal.

13. EUSEMIA LUCTIFERA.

Nigra; caput et thorax albo guttata; antennæ apices versus albæ; pectus et pedes fulvescentia; abdomen subcyaneum; alæ cyaneo notatæ, anticæ albo quinquemaculatæ, posticæ albo quadrimaculatæ.

Agarista luctifera, Boisd. Spec. Gén. Léop. i. pl. 14, f. 4.

Each wing has a white mark on the angle of the hind border, and the fore wings have white tips; the hind wings have very few blue marks.

- a, b. Java. From Mr. Argent's collection.
- c. Java. From Mrs. Henry's collection.

14. EUSEMIA MELITE.

Nigra; caput albo maculatum; antennæ albido cinctæ; thorax luteo fasciatus, albo quadrivittatus; abdomen testaceo fasciatum, apice subtusque luteum; alæ strigis cyaneis fasciisque duabus macularibus indeterminatis flavo-albis.

Agarista Melite, MSS.

Black. Head mostly clothed with white hairs which form spots above. Antennæ with a whitish band above towards their

tips. Thorax with a luteous interrupted band in front and with four white stripes. Pectus mostly luteous. Abdomen with a testaceous band on the hind border of each segment, luteous beneath and at the tip. Wings with some blue marks, and each with about eight yellowish white spots, which form two very irregular bands, the first composed of two spots, the other of six. Length of the body 8 lines; of the wings 22 lines.

a. Java. From the East India Company's collection.

15. EUSEMIA PALES.

Alæ nigrae, fimbria apicali alba; anticæ fascia alba; posticæ macula magna discali cærulea, hæ subtus dimidiatim fulvæ.

Agarista Pales, *Boisd. Guér. Icon. Règ. Anim. Ins.* pl. 83, f. 1, 1a.
Faune Ent. Mad. Bourb. et Maur. Léop. 70, pl. 10, f. 1, 2.
Chenu, Enc. d'Hist. Nat. Pap. 233, f. 398.

Madagascar.

Genus 10. HECATESIA.

Antennæ cylindricæ, fusiformes, articulis distinctis, pilosis, clava oblonga. Palpi dilatati, hirsutissimi, articulis vix distinctis, clypeum ultra non assurgentes. Lingua cornea, in spiris convoluta. Alæ deflexæ. Thorax hirsutissimus.

Hecatesia, *Boisd. Monogr. Zygen.* 11; *Blanch. Hist. Nat. Ins.* ii. 350; *Chenu, Enc. d'Hist. Nat. Pup.* 235, 5.

1. HECATESIA FENESTRATA.

Alæ anticæ nigro-fuscæ, fasciis duabus transversis albis maculaque diaphana ad costam; posticæ luteæ, margine lato punctoque discali, nigris; abdomen luteum, serie punctorum nigrorum.

Hecatesia fenestrata, *Boisd. Monogr. Zygen.* 11, pl. 1, f. 2; *Voy. de l'Astrolabe*, Pt. 1, *Lép.* 171; *Spec. Gén. Léop.* i. pl. 14, f. 7.
Chenu, Enc. d'Hist. Nat. Pap. 236, f. 403. *White, Grey's Journ. Exped. Disc. Austral. Append.* 415, 8, f. 2.

a. New Holland. From Mr. Children's collection.

b, c. New Holland.

2. *HECATESIA* THYRIDION.

Abdomen luteum, punctis nigris triseriatis; alæ anticæ nigrae maculis albis triseriatis, maculaque diaphana ad costam; posticæ luteæ, margine lato punctoque discali nigris.

Hecatesia Thyridion, *Feisthamel, Voyage de la Favorite*, v. *Suppl.* 19, pl. 5, f. 1. *White, Append. Capt. Grey's Journ. Exped. Discov. Austral.* 475, 8, f. 1.

a—c. New Holland. Presented by Capt. Grey.

d. New Holland. From Mr. Children's collection.

Genus 11. *ÆGOCERA*.

Palpi clypeum ultra insigniter assurgentes; articulo 2o pilis in fasciculum producto et rostriformi hirsutissimo. Antennæ distincte fusiformes, (in medio crassiores, et sensim a basi ad apicem graciliores). Alæ deflexæ, anticæ trigonæ. Tibiæ squamis elongatis vestitæ.

Ægocera, *Latr. Gen. Crust. et Ins.* iv. 211; *Boisd. Mon. Zyg.* 13; *Blanch. Hist. Nat. Ins.* ii. 350; *Chenu, Enc. d'Hist. Nat. Pap.* 236, 6; *Croch.*

1. *ÆGOCERA* VENULIA.

Alæ anticæ ferrugineo-fusca, vitta longitudinali albida rubro marginata; alæ posticæ fulvæ margine maculaque discali fuscis; abdomen fulvum.

Phalæna venulia, *Cramer, Pap. Exot.* ii. 107, pl. 165, f. D.

Bombyx venulia, *Fabr. Suppl. Ent.* 158, 9.

Ægocera venulia, *Latr. Gen. Crust. et Ins.* iv. 211; *Dict. d'Hist. Nat. Dalm. Anal. Ent.* 49. *Boisd. Monogr. Zygen.* 13, pl. 1, f. 3. *Chenu, Ent. d'Hist. Nat. Pap.* 236, f. 404. *Croch. ed Règn. Anim. Atlas, Ins.* pl. 148, f. 1.

Bengal.

a. Bengal. From Mr. Children's collection.

b. Nepaul. Presented by E. Doubleday, Esq.

c. East Indies. From Mr. Argent's collection.

d—f. North India. From Mr. Stevens' collection.

g. ———? From Mr. Milne's collection.

2. *ÆGOCERA RECTILINEA*.

Alæ anticæ ferrugineo-fuscae, vitta alba integra subparallela immaculata antice bidentata postice unidentata; posticæ fulvæ, margine maculaque discali fuscis; abdomen fulvum.

Ægocera rectilinea, *Boisd. Spec. Gén. Lép.* i. pl. 14, f. 5.

Like *Æ. venulia* in colour, but the white in the fore wings forms a continuous and nearly parallel stripe, and has two indentations in front and one behind, but contains no spot.

a. Ashanti. From the collection of the Wesleyan Missionary Society.

3. *ÆGOCERA MAGNA*.

Nigro-fusca, aut ferruginea; caput subtus, pectus, abdomen et pedes lutea; caput albo bivittatum; palpi albo cincti; thorax antice albo trivittatus; alæ anticæ vitta postica quadrimaculati, macula antica, fasciæque obliqua discali, albis; posticæ flavæ nigro aut ferrugineo marginatæ et unimaculatæ.

Brownish black. Head and thorax beneath, abdomen and legs luteous. Head with two white stripes above. Palpi with a white band, clothed beneath with luteous hairs. Thorax with three white stripes in front. Fore wings with some reddish marks towards the base, and with six white spots, four of which form an interrupted band extending from the base along the hind border, the fifth near the fore border opposite the second, the sixth forming a short oblique band in the disk nearer the tip. Hind wings yellow, with a broad black hind border, and with a black spot in the disk near the fore border. Fore femora black above; fore tibiæ with black rings; fore tarsi with white rings; middle tibiæ with a black dot on the knees, another near the base, and the third at the tip. Length of the body 9—11 lines; of the wings 20—25 lines.

Var. Fore wings ferruginous instead of brownish black; hind wings with the hind border and the discal spot ferruginous, the latter very large.

a—h. Sierra Leone. Presented by the Rev. D. F. Morgan.

i. ———? Presented by E. Doubleday, Esq.

4. *ÆGOCERA FERVIDA*.

Nigro-fusca; caput subtus, pectus, abdomen et pedes lutea; caput et thorax anticus albo univittata; palpi basi albi; abdomen vittis duabus macularibus apiceque fuscis, subtus testaceum; alæ anticæ albo-pulverulentæ et ciliatæ, vitta una rubiginea duabusque albis, subtus flavæ nigro bimaculatæ; posticæ flavæ, nigro marginatæ et unimaculatæ.

Brownish black. Head and thorax beneath and legs luteous. Head and fore part of thorax with a white stripe above. Palpi white towards the base. Abdomen luteous above, brown at the tip, with two rows of brown spots on each side, testaceous beneath. Fore wings powdered with white, with a white fringe, with a deep red stripe beneath the fore border and with two white stripes, the first extending along two-thirds of the length from the base, nearly parallel to the hind border; second nearer the tip, much shorter, very oblique; under side yellow, with two black spots in the disk, ferruginous towards the tip. Hind wings luteous-yellow, with a broad black hind border, and with a black spot in the disk near the fore border; border reddish beneath. Legs luteous; tibiæ with black spots; tarsi black, with white rings. Length of the body 11 lines; of the wings 23—25 lines.

Var. β. Abdomen with no lateral spots, but with a row of dorsal spots. Spots above and beneath the wings and hind border of hind wings reddish instead of blackish.

a. S. Africa. Presented by Dr. A. Smith.

b. Port Natal. From M. Gueinzus' collection.

5. *ÆGOCERA BIMACULA*.

Nigro-fusca; caput albo bivittatum, subtus albo-hirtum; palpi basi albi; thorax albo trivittatus, subtus luteus; abdomen luteum, vittis tribus macularibus nigris; alæ anticæ albo conspersæ, rubido variæ, vitta indentata fasciæque albis, subtus flavæ fusco trimaculatæ ferrugineo marginatæ; posticæ nigro marginatæ et bimaculatæ.

Brownish black. Head with white hairs beneath, and with two stripes of white hairs above. Proboscis piceous. Palpi white towards the base. Thorax with three white stripes, luteous beneath. Abdomen luteous, with a dorsal stripe of black spots above, and with a stripe of black spots on each side beneath. Fore wings powdered

with white, with a gray fringe, partly deep red in the disk, with a white stripe, which widens from the base to the middle, and has two indentations in front and one behind, and terminates obliquely; beyond this and parallel to its termination, is a short oblique white band; under side yellow, with a ferruginous border, and with two or three brown spots or oblique bands, which correspond to the white above. Hind wings luteous, with two black spots in the disk, and with an undulating black hind border; fringe luteous. Legs luteous; tibiæ with black spots above; tarsi with black rings; fore femora black above. Length of the body 7—9 lines; of the wings 16—23 lines.

Var. β . White stripe of the fore wing divided by its indentations into two spots.

Var. γ . White stripe of the fore wing divided by its indentations into three spots.

a. North India. From Mr. Argent's collection.

b, c. North India. From Mr. Stevens' collection.

6. *ÆGOCERA*? *AMABILIS*.

Fulva; alæ anticae rufæ, margine maculisque plurimis flavis, his nigro cinctis; alæ posticæ luteæ, macula discali margineque nigris, hoc intus flexuoso.

Ægocera amabilis, *Boisd. Spec. Gén. Lép.* i. pl. 14, f. 6. *Westw. ed. Drury*, ii. 25, pl. 13, f. 3.

Phalæna Noctua amabilis, *Drury, Ins.* ii. 23, pl. 13, f. 3. *Index.*

Crameria amabilis, *Hübner. Verz. Schmett.* 168, 1734.

West Africa.

7. *ÆGOCERA*? *AMALTHEA*.

Nigra; alæ atrae; anticae fascia obliqua, posticæ macula discali saturate flavis; abdomen flavum, nigro lineatum. Long. 10 lin.; alar. 21—24 lin.

Ægocera? *Amalthea*, *Dalm. Anal. Entom.* 49, 24.

Brazil.

Genus 12. ALYPIA.

Corpus breve, sat robustum. Caput parvum. Oculi mediocres. Proboscis corporis dimidio brevior. Palpi subhirti, caput paullo superantes; articulus 2us 1o paullo longius; 3us 2o dimidio brevior. Antennæ extrorsum crassiores, apice attenuatæ, corporis

dimidio multo longiores. Thorax crassus. Abdomen gracilius. Alæ sat latæ, non elongatæ, marginibus rotundatis. Pedes robusti, hirti, calcaribus longis validis.

Zygæna, p., *Fabr.*

Sphinx, p., *Hübner. Zutr.; Abbot & Smith; God.*

Alypia, *Hübner. Verz. Schmett. Heliacæ Nigræ Alypiæ*, 351; *Harris; Kirby.*

1. ALYPIA OCTOMACULATA.

Nigra; thoracis margo anticus humerique flavi; alæ anticæ flavo bimaculatæ, posticæ albo binoculatæ; tibiæ anteriores aurantiacæ.

Zygæna octomaculata, *Fabr. Ent. Syst.* iii. 1, 402, 54.

Sphinx octomaculata, *Cram. Pap. Exot.* iv. pl. 345, f. C.

Sphinx octomaculalis, *Hübner. Zutrage*, 22, 60, f. 119, 120.

Sphinx octomaculata, *Godart. Smith & Abbot, Ins. Georg.* 8, pl. 44.

Alypia octomaculalis, *Hübner. Verz. Schmett.* 351, 3359.

Alypia quadriguttalis, *Hübner. Verz. Schmett.* 351, 3360.

Alypia octomaculata, *Harris, Descr. Cat. N. Amer. Sphin. (Amer. Journ. Sci. & Arts, xxxvi. 2), 34.*

"Black; with two sulphur-yellow spots on the fore wings, and two white ones on the hind wings; shoulder-covers and front sulphur-yellow; fore and middle tibiæ thickly covered with orange hairs. Larva cylindrical, elongated, yellow, with transverse rows of black points, slightly hairy, without a caudal horn. Lives on the grape-vine, and encloses itself in a cocoon in the earth."

North America.

a—d. United States. Presented by E. Doubleday, Esq.

e. Georgia. From Mr. Milne's collection.

f—i. Nova Scotia. From Mr. Children's collection.

j, k. Nova Scotia. From Lieut. Redman's collection.

The Canada *A. 8-maculata* differs generally from those of the United States, in having smaller spots and less distinct blue streaks in the fore wings, and it has no trace of the basal spot in the hinder wings.

2. ALYPPIA MACCULLOCHII.

Nigra; antennæ albo annulatæ; thorax guttis duabus anticis albidis, lateribus albido-flavescentibus; alæ anticæ vitta gutta fasciæque flavescente-albis; posticæ fasciis duabus abbreviatis subarcuatis albis; intermediæ luteo-hirtæ.

Alypia MacCullochii, Kirby, *Fauna Bor. Amer.* iv. 301, 1, pl. 4, f. 5.

Black, clothed with black hairs. 'Antennæ with white rings. Thorax with a whitish dot behind each eye in front; sides clothed with yellowish white hairs. Fore wings with some blue scales at the base by the fore border, which is slightly dilated for half its length; three yellowish white marks in the disk; the first a short subtriangular stripe near the base; the second a dot between the first and the third, which is a short band. Hind wings with two short slightly curved white bands, the first or basal one much broader than the 'second. Middle tibiæ clothed with luteous hairs. Length of the body 5—6 lines; of the wings 12—14 lines.

Canada. Nova Scotia.

a—c. St. Martin's Falls, Albany River, Hudson's Bay. Presented by Dr. Barnston.

Genus 13. METAGARISTA.

Mas. Caput mediocre. Oculi magni. Proboscis brevis. Palpi supra squamosi, subtus pilosissimi; articulus 2us 1o paullo longior; 3us minimus. Antennæ graciles, corporis dimidio longiores, fere ad apices attenuatas crassiores. Abdomen compressum, sat longum, sublineare, thorace multo angustius. Alæ anticæ subtrigonæ, sat latæ, non elongatæ. Pedes mediocres, tarsis posticis femoribus tibiisque dense et late ciliatis.

Male. Head of moderate size. Eyes large. Proboscis short. Palpi squamose above, very hairy beneath, rising a little above the head; second joint a little longer than the first; third very small. Antennæ slender, more than half the length of the body, increasing gradually in breadth from the base till very near the tips where they

slightly taper. Abdomen compressed, rather long, nearly linear, much narrower than the thorax, extending a little beyond the hind wings. Fore wings subtriangular, slightly rounded in front, and along the outer border, straight behind. Hind wings slightly rounded behind and at the tips, broader and much shorter than the fore wings. Legs of moderate length; femora, tibiæ and hind tarsi thickly fringed with long hairs. Much resembles some of the *Noctuidæ*.

1. METAGARISTA TRIPHÆNOIDES.

Fusco-ferruginea; alæ anticæ albo conspersæ et subfasciatae, strigis cyaneis et testaceis arcuatis ornatae, subtus fasciis duabus fuscis unaque intermedia alba; posticæ luteæ, fusco marginatae.

Head and thorax clothed with ferruginous and testaceous hairs. Palpi, abdomen, and legs with luteous hairs. Antennæ piceous. Fore wings brownish ferruginous, partly powdered with white, which forms an imperfect band beyond the middle; two blue semicircles resting on the hind border, curved towards each other, and with a blue streak between them, the first extends to the fore border, near which are two testaceous rings, each including a blue mark, and there is a third blue spot nearer the tip; under side with a brown dot in front, and beyond it two brown nearly upright bands, including a white band. Hind wings luteous, with brown borders. Legs testaceous; fore tarsi piceous. Length of the body 13 lines; of the wings 30 lines.

a. Ashanti. From the collection of the Wesleyan Missionary Society.

b. ———? Presented by E. Doubleday, Esq.

Genus 14. PAIS.

Caput parvum. Oculi mediocres. Proboscis brevis. Palpi sat longi, vix pilosi, caput multo superantes; articulus 2us 1o paullo longior; 3us minimus. Antennæ graciles, corporis dimidio paullo longiores, extrorsum subcrassiores, quadrario apicali attenuato. Abdomen gracile, subattenuatum. Alæ anticæ mediocres, subtriangulæ. Pedes sat graciles, subpilosi; tibiæ calcaribus elongatis.

Head small. Eyes of moderate size. Proboscis short. Palpi rather long, hardly hairy, rising much above the head; second joint

a little longer than the first; third very small. Antennæ slender, a little more than half the length of the body, very slightly increasing in thickness for three-quarters of the length, slightly tapering from thence to the tips. Abdomen rather slender, slightly tapering, extending very little beyond the hind wings in the male, shorter in the female. Fore wings moderately long, subtriangular, slightly rounded along the outer border. Hind wings a little broader and much shorter than the fore wings, slightly rounded along the hind border.

Pais, *Hüb. Verz. Schmett.* 279,
Brepbiæ Dubiæ Paides.

Legs somewhat slender, slightly hairy; apical spurs of the posterior tibiæ and middle spurs of the hind tibiæ rather long and slender.

1. PAIS DECORA.

Nigra; caput et thorax flavo guttata; abdomen fasciis interruptis flavis; alæ anticæ maculis fasciisque rufis et flavis nigro cinctis, fasciaque apicali e guttis oblongis flavis, subtus posticæque rufæ nigro marginatæ flavo nonnunquam marginatæ.

Phalæna Noctua decora, Linn. *Syst. Nat.* ii. 1068, 14; *Mus. Lud. Ulr.* 17, 382. *Petiv. Mus.* pl. 58, f. 7. *Cram. Pap. Exot.* iii. 19, pl. 219, f. F. G.

Bombyx decora, *Fabr. Sp. Ins.* ii. 186, 74; *Mant. Ins.* ii. 117, 95; *Ent. Syst.* iii. 1, 441, 104.

Phalæna Bombyx decora, *Gmel. ed. Syst. Nat.* i. 5, 2429, 551.

Brepha dubia Julia, *Hüb. Samml. Exot. Schmett.* i. *Lep* 1, *Nact.* ii. *Semigeom.* viii. *Brepha B. dubia*, f. 1—4.

Phalæna Noctua Julia, *Cram. Pap. Exot.* i. pl. 7, f. E. F.

Pais decora, *Hüb. Verz. Schmett.* 279, 2744.

a. Cape. From M. Drège's collection.

e. Cape. Presented by Major-General Hardwicke.

f. Cape. From Mr. Milne's collection.

g. Port Natal. From Dr. Krauss' collection.

h. South Africa. Presented by the late Earl of Derby.

i, j. South Africa. Presented by Dr. A. Smith.

Tribe ⁵ ZYGÆNIDES.

Frons squamosa. Palpi cylindrici, barbati vel hirsuti, articulo 3o distinctissimo nonnunquam nudo. Antennæ fusiformes, nonnun-

quam cylindricæ et moniliformes, sæpe pectinatæ. Lingua longa, in spiris convoluta. Tibiæ apice calcaribus quatuor plus minusve distinctis armatæ. Alæ deflexæ, corpore longiores; anticæ angustiores; posticæ rotundatæ, rariissime angulatæ. Abdomen cylindricum sublineare. Volatus diurnus. Larvæ subcontractæ, pigræ, capite minuto, pubescentes vel pilosulæ. Pupæ folliculatæ.

Procides et Zygænides, *Boisd. Mon. Zyg. 21; Ind. Méth. Lep. Eur. 50.*

Zygænides, *Duponchel.*

Sphinx Zygæna, *Gmel.*

Sphinges Papilionides, *Hüb. Verz. Schmett. 115.*

Zygænides, p., *Latr.*

Sphingides, p., *Lam.*

Zygænidae, *Leach, Ed. Enc. ix. 131; Steph.*

Anthroceridae, *Westw. and Humph. Brit. Moths, i. 27.*

Glaucopites, *Newman, Ent. Mag. i. 384.*

Zygæniadæ et Glaucopididæ, *Harris, Amer. Journ. of Sci. and Arts, xxxvi. 2.*

Zygænidae Syntomides (Herr.-Schæff.) et Heterogynides (Herr.-Schæff.), *Lederer.*

Heterogynides, Zygænides et Syntomides, *Herr.-Schæff.*

This tribe is merely a section of the great group of Bombycoidea, but is here numbered separately in accordance with the usual classification of Lepidoptera. It does not apparently connect the preceding tribe with the following, but is nearer allied to the latter than to the former.

Genus 1. ZYGÆNA.

Larvæ contractæ, subcylindricæ, obesæ, pubescentes. Pupa folliculo chartaceo fusiformi vel crustaceo ovoideo caulibus herbaceis adfixo, inclusæ.

Palpi breves, cylindrico-conici, pilosi, acuti, ultra frontem vix ascendentes. Lingua cornea, spiraliter convoluta. Antennæ claviformes, corporis dimidio longiores, apice imberbia. Alæ elongatæ, maculis discoloribus notatæ. Pedes mediocres, obsolete calcarati. Tibiæ posticæ pone medium et apice calcaratæ.

Zygæna, *Fabr.; Latr.; Dum.; Lam.; Ochs.; God.; Duponch.; Boisd.; Keferstein, Ent. Zeit. Stett. ii. 117; Blanch.; Chenu; Herr.-Schæff.; Lederer.*

Sphinges Adscitæ, *Linn.; De Vill.*

Sphinx-Béliers, *Geoff.*

Sphinx, p., *Esp.*; *Hüb.*; *Borkh.*

Anthrocera, *Scop. Intr. Hist. Nat.* i. 414; *Steph.*; *Westw.*

Zygænæ, *Hüb. Verz. Schm.* 116.

In the *Zygænæ* there are many local varieties which have been named, and the synonyms of the species of this genus are complicated; they have been registered by Boisduval and by Herrick-Schäffer, and the unravelling of them by the latter author is very contradictory to that of the former. The deficiencies in the quotations in this list will be supplied as soon as opportunities occur for ascertaining the most correct nomenclature.

Herrich-Schäffer's Synopsis of the Species:—

- a. *Alæ posticæ rubræ* (in varietatibus interdum flavæ).
- b. *Alarum anticarum maculæ nec albo nec flavo marginatæ.*
- c. *Maculæ non nigro cinctæ.*
- d. *Alæ anticæ maculis tribus longitudinalibus.*
- e. *Maculæ confluxæ solum limbum nigrum relinquentes.*
 - 1. *rubicundus.*
- ee. *Alarum anticarum margo interior a basi versus medium rufus.*
 - 2. *erythrus.*
- eee. *Alarum anticarum margo interior niger.*
 - f. *Macula media magna versus angulum ani dilatatione securiformi.*
 - 3. *Minos.* 4. *Punctum.* 5. *Keferstienii.*
- ff. *Macula media cuneiformis, interior bis trientum longitudinis alarum non superat.*
 - 6. *Brizæ.*
- dd. *Alæ anticæ maculis 3, 4 aut 5, apicali rotundata.*
 - e. *Antennæ sensim incrassatæ, acutæ.*
 - 7. *Scabiosæ.* 8. *Triptolemus.*
- ee. *Antennæ clava magna, obtusa.*
 - f. *Abdomen sine cingulo rubro.*
- g. *Maculæ 3a et 5a separatæ, 3a elongato-ovalis; alarum posticarum limbus latissime æquilate nigricans.*
 - 9. *Orion.*
- gg. *Macula 3a nulla; alarum posticarum limbus tenue niger.*
 - 10. *Contaminei.*
- ff. *Abdomen cingulo rubro.*
 - 11. *Sarpedon.* 12. *Balearica.* 13. *Uralensis.*
- ddd. *Alæ anticæ maculis 5, 5a magna reniformi.*
 - 14. *Achilleæ.*
- ddd. *Alæ anticæ maculis 5, 5a simplici.*
 - e. *Abdomen cingulo rubro.*

15. Cynaræ.

ee. Abdomen sine cingulo rubro.

f. Antennæ fusiformes.

g. Alarum anticarum margo interior et limbus non discreti; macula 3a perparva, elongata. Alæ posticæ fœminæ margine integro.

16. Meliloti.

gg. Alarum anticarum margo interior angulo obtuso in limbum transit.

h. Alarum anticarum maculæ subtus separatæ.

17. Lonicæræ. 18. Trifolii.

hh. Alarum anticarum maculæ subtus confluxæ.

19. Angelicæ.

ff. Antennæ clavatæ obtusæ.

20. Corsica. 21. exulans. 22. Celeus.

dddd. Alæ anticæ maculis 6, 5a et 6a interdum contiguis at non omnino conjunctis.

e. Antennæ clava brevi obtusa crassa.

23. Mediterranea.

ee. Antennæ clava elongata tenui acuta.

f. Abdomen cingulo læte rubro; prothorax niger.

g. Abdominis cingulum subtus contiguum.

24. Centauræ. 25. Peucedani.

gg. Abdominis cingulum subtus apertum.

26. Dorycnii.

ff. Abdomen cingulo obsolete rubro.

27. Stentzii. 28. Anthyllidis.

fff. Abdomen et prothorax innotata.

g. Alæ posticæ limbo integro; macula 3a elongato ovalis; 6a divisa.

29. Charon.

gg. Alæ posticæ limbo ante angulum aut sinuato; macula 3a rotundata.

30. Hippocrepidis. 31. Medicaginis. 32. Transalpina.

33. Filipendulæ.

cc. Alarum anticarum maculæ lateribus crasse nigris.

34. Rhadamantus. 35. Oxytropis.

bb. Alarum anticarum maculæ in his albo aut flavo marginatæ, in illis confluxæ, maculas nigras includentes; 6a lunata.

c. Maculæ 5a et 6a omnino confluxæ.

d. Prothorax niger, albido mixtus.

36. Sedi.

dd. Prothorax et scapulæ intus coccinea.

37. læta. 38. lætifica.
- ddd. Prothorax ruber.
39. Olivierii.
- cc. Maculæ 5a et 6a aut omnino separata, aut maculam nigram includentes.
- d. Rubido cinnabarina aut miniacea; maculæ flavo cinctæ; 6a 5am utrinque tangens.
- e. Corpus nigrum; prothorax obsolete albo marginatus.
40. hilaris.
- ee. Prothorax et abdominis cingulum rubra.
41. Fausta. 42. Bœtica. 43. Faustina.
- eee. Corpus omnino nigrum.
44. Algira.
- dd. Rubido coccinea; maculæ albido cinctæ, 6a 5am non aut in costis omnibus tangens.
- e. Macula 6a semper alba.
45. occitanica.
- ee. Macula 6a rubra.
- f. Antennæ obtusæ, brevissime acuminatæ.
46. Onobrychis.
- ff. Antennarum clava obtusissima.
47. Oribasus. 48. Barbara.
- aa. Alæ posticæ nigræ macula in apice areolæ mediæ rubra radiisque plerumque e basi rubris (var. flavis aut albis).
- b. Abdomen sine cingulo.
- c. Thorax niger.
49. Stæchadis, (*Ochs.*). 50. xanthographa.
- cc. Prothorax albo marginatus.
- ? Stæchadis (*Boisd.*). 51. Lavandulæ.
- bb. Abdomen cingulo rubro aut flavo.
52. Ephialtes.

a. Spots of the wings not ocellated.

Atrosignatæ, p., *Hübner. Verz. Schmett.* 117.

b. Two basal longitudinal spots extending beyond the middle of the wing.

Mesembryni, *Hübner. Verz. Schmett.* 118.

1. ZYGÆNA RUBICUNDA.

Alæ anticæ cyaneo-virescentes, subdiaphanæ, maculis tribus miniaceis elongatis, valde dilatatis margineque interiori miniaceo; posticæ miniacæ, tenuiter nigro marginatæ; prothorax et humeri lutescentes.

Sphinx rubicunda, Hübn. *Sphing.* 137.

Zygæne erythrus, Boisd. *Mon. Zyg.* 28, pl. 1, f. 6. *Duponchel, Suppl. Hist. Nat. Lép. Franc.* ii. 32, pl. 4, f. 1. *Chenu, Enc. d'Hist. Nat. Pap.* 247, f. 428.

Mesembrynus rubicundus, Hübn. *Verz. Schmett.* 119, 1292. *Geyer.*

Sphinx Polygalæ, Esp. ii. pl. 34. *Cont.* 9, f. 4.

Zygæna rubicunda, *Duponch. Suppl. Hist. Nat. Lép. Franc.* ii. 147, 172. *Freyer, Beitr. Schmett.* iii. 13, pl. 200, 344, f. 3. *Herr.-Schäff. Samml. Eur. Schmett. Suppl.* ii. 30, 8.

Hind spot securiform. Internal border of the wings red.

South Italy; Sicily.

a. Presented by the Entomological Club.

b. From Dr. Friwaldsky's collection.

2. ZYGÆNA ERYTHRUS.

Prothorax et humeri lutescentes; alæ anticæ cyaneæ aut virescentes, maculis tribus miniaceis, elongatis, dilatatis, margineque interiore miniaceo; posticæ miniacæ nigro marginatæ.

Sphinx erythrus, Hübn. *Sphing.* 77, 1, pl. 18, f. 87.

Sphinx Polygalæ, Esp. *Schmett.* ii. pl. 34. *Cont.* 9, f. 4.

Mesembrynus erythrus, Hübn. *Verz. Schmett.* 119, 1291.

Zygæna erythrus, Ochs. *Schmett. von Eur.* ii. 21, 1. *Treits. Suppl.* x. 103. *Herr.-Schäff. Samml. Europ. Schmett. Suppl.* ii. 30, 9, i. *Zyg.* pl. 6, f. 44. *Duponch. Suppl. Hist. Nat. Lép. France*, ii. 147, 172. *Lederer, Verhandl. Zool. Bot. Ver. Wien.* ii. 70.

Zygæna Saporæ, Boisd. *Mon. Zyg. Errata*, 1. *Ind. Méth. Errata*, 2. *Spec. Gen. Lep.* pl. 15, f. 7. *Duponch. Suppl. Hist. Nat. Lép. France*, ii. 34, pl. 4, .1.

South France. Italy. Sicily.

3. ZYGÆNA MINOS.

Alæ anticæ cyaneæ aut virescentes, maculis tribus elongatis, dilatatis sanguineis, posteriore securiformi; posticæ rubræ, margine tenuissimo, cyanescente; antennæ clavatæ.

- Zygæna Minos*, Ochs. Schmett. von Eur. ii. 22, 2. Boisd. Mon. Zyg. 29, pl. 1, f. 7. Duponch. Suppl. Hist. Nat. Lép. France, ii. 40, pl. 4, f. 4. Zeller, Ent. Zeit. Stett. v. 39, 2. Freyer, Ent. Zeit. Stett. v. 85; Beitr. Schmett. i. 156, 158, pl. 86, f. 1. Eversm. Faun. Volg. Ural. 93, 1. Herr.-Schæff. Samml. Eur. Schmett. Suppl. ii. 30, 10, i. Zyg. pl. 2, f. 13—16.
- Sphinx Minos*, Hübn. Sphing. 77, pl. 2, f. 8, (fœm.) Wien. Verz. 45, fam. G. 1. Illig. Fuessl. ii. 158, 2.
- Zygæna Pythia*, Fabr. Sp. Ins. ii. 158, 2; Mant. ii. 101, 2; Gen. Ins. Mant. 275, 112. Panz. Viewg. Rossi.
- Sphinx Zygæna Pythia*, Gmel. ed. Syst. Nat. i. 5, 2391, 106.
- Zygæna Scabiosæ*, Fabr. Ent. Syst. iii. 386, 2. Panz. Naturf. Haw. Lep. Brit. 74. Steph. Ill. Brit. Ent. Haust. i. 108.
- Sphinx Pilosellæ*, Esp. Schmett. ii. pl. 24, f. 2; Suppl. 6, f. 2, a, b. Cont. 15, f. 3 (larva). Engr. Pap. d'Eur. iii. 46, pl. 95, f. 133, a—d. Borkh. Eur. Schmett. ii. 25, 17; 125, 164.
- Sphinx Vicinæ*, Lang. Verz. 2. Ausg. 67, 607, 609.
- Sphinx purpuralis*, Müll. Zool. Dan. 116, 1345.
- Mesembrynus Minos*, Hübn. Verz. Schmett. 119, 1290.
- Zygæna Minos*, var. h. Hering, Ent. Zeit. Stett vii, 235, 4.
- Zygæna Heringi*, Zeller.
- Sphinx Polygalæ*? Esper, (teste Lederer).

Hind spot securiform. Internal border of the wings of the ground colour.

France, Austria, Hungary, Russia, Pyrenees, Switzerland, Italy, Sicily.

a—d. From M. Becker's collection.

e. South France.

f. ——— ?

4. ZYGÆNA ARMENA.

Corpus atro-cæruleum; *prothorax pedesque albi*; *abdominis cingulum rubrum*; *ala antica cæruleo-nigræ, maculis tribus rubris, 1a sublineari 2aque securiformi basalibus, 3a apicis reniformi*; *ala postica rubræ, nigro ciliatæ*.

Zygæna Armenia, Eversmann, Bull. Soc. Imp. Nat. Mosc. xxiv. 1851. No. 2, 625, 13.

South of the Caucasus.

5. ZYGÆNA SYRACUSIA.

Alæ anticæ maculis quinque rufis, duabus basalibus, duabus mediis antica minima, una apicem versus antica.

Zygæna Syracusia, Zeller, *Isis*, 1847.

Sphinx (*Zygæna*) Syracusia, Freyer, *Beitr. Schmett.* v. 39, 914, pl. 506, f. 3, 4.

Zygæna Charon? Boisd. *Icones*, pl. 54.

Syracuse.

6. ZYGÆNA PLUTO.

Alæ cyaneæ aut cyaneo-virescentes, maculis tribus elongatis rubris, posteriore cuneiformi; posticæ rubræ, margine nigro-cyaneo; antennæ clavatæ.

Zygæna Pluto, Ochs. *Schmett. von Eur.* ii. 26, 3. Boisd. *Mon. Zyg.* 31, pl. 2, f. 4. Herr.-Schæff. *Samml. Eur. Schmett. Suppl.* i.

Zyg. pl. 13, f. 93. Chenu, *Enc. d'Hist. Nat. Pap.* 247, f. 429.

Sphinx Pythia, Hübn. *Sphing.* 78, 5, pl. 18, f. 88, (mas).

Mesembrynus Pluto, Hübn. *Verz. Schmett.* 119, 1289.

Hind spot cuneiform.

Austria. Italy.

7. ZYGÆNA BRIZÆ.

Alæ anticæ subdiaphanæ, pallide cyanescentes; maculis tribus oblongis parallelis, coadunatis, rubris; posticæ rubræ; antennæ subclavatæ.

Zygæna Brizæ, Ochs. *Schmett. von Eur.* ii. 27, 4. Boisd. *Mon.*

Zyg. 55, pl. 2, f. 3. Duponch. *Suppl. Hist. Nat. Lép.* ii. 55, pl.

5, f. 4. Herr.-Schæff. *Samml. Eur. Schmett. Suppl.* ii. 32, 13, i.

Zyg. pl. 7, f. 50, var.

Sphinx Brizæ, Esp. *Schmett.* ii. 27, pl. 43. *Cont.* 18, f. 3, 4. Hübn.

Sphing. 78, 4, pl. 18, f. 85.

Mesembrynus Brizæ, Hübn. *Verz. Schmett.* 119, 1286, (mas).

Hind spot narrow, linear, and parallel to the two basal spots.

Austria, Italy, Hungary, Dalmatia. South Russia.

Jena, Germany?

Var. *Alæ anticæ cyaneo-violaceæ, subdiaphanæ, maculis tribus elongatis, dilatatis rubris, posteriore securiformi; posticæ rubræ, margine latiore, cyanescente-violaceo, subdiaphano.*

Zygæna Lathyri, *Boisd. Mon. Zyg.* 32, pl. 2, f. 1.

Hind spot securiform. No dot between the two basal spots.

Ragusa.

Var. ——— ?

Zygæna dystrepta. *Fisch.*

South Russia.

8. ZYGÆNA CEDRI.

Statura Z. *Brizæ*; *antennæ crassiores, longiores; caput et dorsum villosa; abdomen cylindricum, valde elongatum, parte posteriore supra late sanguineum; alæ anticæ longiusculæ.*

Zygæna Cedri, *Bruand, Ann. Soc. Ent. Fr. 2me Sér. iv.* 202, 2, pl. 8, No. 1, f. 2.

Algiers.

9. ZYGÆNA PUNCTUM.

Alæ anticæ cyaneæ aut virescentes, maculis duabus rubris elongatis, puncto intermedio concolore, maculaque securiformi ad apicem; posticæ rubræ, margine cyaneo.

Zygæna Punctum, *Ochs. Schmett. von Eur.* ii. 36, 7. *Boisd. Mon. Zyg.* 33, pl. 2, f. 2. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. 31, 11. *Duponch. Suppl. Hist. Nat. Lép. France*, ii. 49, pl. 5, f. 1. *Eversm. Faun. Volg. Ural.* 94, 4.

Sphinx Punctum, *Hübner. Sphing.* pl. 26, f. 119.

Mesembrynus Punctum, *Hübner. Verz. Schmett.* 119, 1288.

Hind spot securiform. A dot between the two basal spots.

Pyrenees, Italy, Hungary, Russia, Illyria, Sicily. Greece.

a, b. From M. Becker's collection

c. From Dr. Friwaldsky's collection.

10. ZYGÆNA PYTHIA.

Alæ anticæ marginibus exceptis rubræ.

Zygæna Kefersteinii, Friwaldsky. Herr.-Schæff. Samml. Eur. Schmett. Suppl. ii. 31, 12, i. Zyg. pl. 11, f. 77.

Sphinx (Zygæna) Pythia, Freyer, Beitr. Schmett. v. 152, 852, pl. 473, f. 1.

Z. Punctum, var. ?

Crete.

11. ZYGÆNA SCABIOSÆ.

Alæ anticæ subdiaphanæ, cyanæ vel pallide cyanescentes ; maculis tribus elongatis, angustioribus rubris ; posticæ rubræ, margine nigrescente ; antennæ subfiliformes, vix clavatæ.

Zygæna Scabiosæ, Fabr. Ent. Syst. iii. 1, 386, 2. Schæff. Icon. Ins, Ratisb. 22, pl. 16, f. 4, 5. Dalm. Act. Holm. 1816, 223, 7. Ochs. Schmett. von Eur. ii. 28, 5. Lam. Hist. Nat. Anim. sans Vert. iv. 6, 3. Boisd. Mon. Zyg. 36, pl. 2, f. 6. Treits. Suppl. x. 104. Duponch. Suppl. Hist. Nat. Lep. France, ii. 43, pl. 4, f. 5. Herr.-Schæff. Samml. Eur. Schmett. Suppl. ii. 32, 14, i. Zyg. pl. 2, f. 17, 18. Chenu, Enc. d'Hist. Nat. 348, f. 430. Eversm. Faun. Volg. Ural. 93, 2.

Sphinx Filipendulæ, Scop. Ent. Carn. 190.

Sphinx purpuralis, Müll. Zool. Dan. 116, 1345.

Sphinx Scabiosæ, De Vill. Ent. Lin. ii. 111, 47. Schevin, Naturf. 10, pl. 97, 7. Fuessli, Ent. Mag. pl. 1, f. 5, 6. Engr. Pap. d'Eur. iii. 49, 50, pl. 96, f. 134, a—d. f. 135. Hübn. Sphing. 78, 5, pl. 18, f. 86, (mas). Esp. Schmett. ii. 187, pl. 24, f. 3. Suppl. 6, f. 3, a. b. Bork. Eur. Schmett. ii. 24, 16, 122, 15.

Zygæna Pythea, Rossi, Faun. Etrusc. ii. 166, 1067.

Zygæna Minos, Schrank, Faun. Boic. ii. 1, 240, 1409.

Mesembrynus Scabiosæ, Hübn. Verz. Schmett. 119, 1287.

Var. *Zygæna Dalmatina*, Boisd. Icones, 44, pl. 54, f. 2. Duponch. Suppl. Hist. Nat. Lép. France, ii. 133.

Var. *Zygæna dalmatina*, Boisd. Icon. Duponch. Herr.-Schæff. Samml. Eur. Schmett. i. Zyg. pl. 8, f. 59, 160.

“Discrepat a *Z. Scabiosæ* præsertim antennis multo crassioribus ere ut in *Z. Punctum*. An hybrida.”

Dalmatia.

Var. *Zygæna Nevadensis*, Ramb. Faune Andalus.

South Spain.

Hind spot rounded. Two basal spots straitened or interrupted.
Dauphiné. Pyrenees. Prussia. Sweden. Austria. Hungary,
Russia. Italy. Sicily.

b b. Internal basal spot longitudinal, external one short.

Lycastæ, p., Hübn. Verz. Schmett. 118, 1285.

12. ZYGÆNA SARPEDON.

Alæ anticæ subdiaphanæ, plumbeo-cærulescentes aut virescentes, nitidæ, maculis tribus elongatis, rubris; posticæ diaphanæ, rubræ, dilatiores, margine latiori, sinuato, plumbeo; abdomen cingulo rubro; antennæ clavatæ, nigricantes; thorax villosogrisescens.

Zygæna Sarpedon, Ochs. Schmett. von Eur. ii. 38, 8. God. Pap. de France, iii. 141, pl. 22, 8. Boisd. Mon. Zyg. 40, pl. 2, f. 7, 8. Ramb. Faune Andalus. pl. 12, f. 8. De Graslin, Ann. Soc. Ent. Fr. 2me Sér. vii. Bull. lxxxiii. Herr.-Schæff. Samml. Eur. Schmett. Suppl. ii. 33. 18, 1. Zyg. pl. 7, f. 51.

Sphinx Sarpedon, Hübn. Sphing. 83, 25, pl. 2, f. 9, (mas). Borkh. Rhein. Magaz. i. B, 629, 9.

Sphinx trimaculata, Esp. Schmett. ii. 16, pl. 40. Cont. 15, f. 7, 8.

Zygæna Cynaræ, God. Pap. de France, iii. 139, pl. 22, 7.

Lycastes Sarpedon, Hübn. Verz. Schmett. 118, 1285.

(Vix varietas).

Wings half transparent. Abdomen with a red band.

South France, Pyrenees, Spain, Portugal.

a, b. ———? From M. Becker's collection.

Var. *Alæ anticæ cyaneæ aut virescentes, subdiaphanæ, maculis duabus elongatis, maculaque dilatata subsecuriformis ad apicem; posticæ subdiaphanæ rubræ, limbo lato, cyaneo; abdomen cingulatum.*

Zygæna Balearica, *Boisd. Mon. Zyg.* 39, pl. 2, f. 5. *Chenu, Enc. d'Hist. Nat.* 248, f. 431. *Duponch. Suppl. Hist. Nat. Lep. France*, ii. 53, pl. 5, f. 3. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. 33, 19, 1, *Zyg.* pl. 1, f. 2. *Virenti-subcinerea*, *maculis et alis posticis cinnabarinis, his apice angustissime nigris, illarum maculis 2a et 4a conjunctis, 3a nulla.*

“Hæc varietas ad *Z. Punctum* prope accedit et vix nisi annulo rubro distincta, inde ad *Sarpedon* referenda. An hybrida?”

South Spain. Pyrenees. Balearic Isles. West France.

a—c. Spain. From. M. Becker's collection.

13. ZYGÆNA FAVONIA.

Alæ anticæ triente basali oblique maculisque duabus rufis; abdomen fascia subapicali rufa.

Sphinx (*Zygæna*) *Favonia*, *Freyer, Beitr. Schmett.* v. 76, 754, pl. 428, f. 1.

Fore wings red for one-third of the length from the base, the red part longer behind than in front; red band very near the tip of the abdomen.

Turkey.

b b b. Wings with three large irregular spots.

14. ZYGÆNA CUVIERI.

Alæ anticæ cyaneo-violaceæ, maculis tribus latis, rubris; posticæ rubræ, margine latiori cyaneo; abdomen et thorax nigra, hirsuta, prothorace abdominisque cingulo rubris.

Zygæna Cuvieri, *Boisd. Mon. Zyg.* 53, pl. 3, f. 6.

Prothorax and band of the abdomen red.

Syria. Amaden, Persia.

b b b b. Wings with five more or less rounded spots.

Agrumeniæ, p., et Lycastæ, p., et Thermophilæ, p., *Hübner. Verz. Schmelt.* 116, 118.

15. ZYGÆNA CORSICA.

Alæ anticæ cyaneæ, subdiaphanæ, disco subluteo irrorato, maculis quinque rubris; posticæ rubræ; antennæ clavatæ; abdominis segmenta albo marginata.

Zygæna Corsica, *Boisd. Mon. Zyg.* 81, pl. 5, f. 2. *Ramb. Ann. Soc. Ent. France*, 267, 1832, pl. 7, f. 5, 6. *Duponch. Suppl. Hist. Nat. Lép. France*, ii. 87, pl. 7, f. 7. *Herr.-Schæff. Samml. Eur. Schmelt. Suppl.* ii. 37, 27, 1, *Zyg.* pl. 1, f. 5, 6.

Wings slightly transparent, rounded. Size very small.

Corsica. Sardinia.

a, b. From M. Becker's collection.

16. ZYGÆNA VALENTINI.

Statura Z. Corsicæ, paullo major; antennæ breves, haud crassæ; corpus latum, valde villosum; abdomen haud elongatum, summo carinatum, parte posteriore supra rubrum; alæ breviusculæ.

Zygæna Valentini, *Bruand, Ann. Soc. Ent. Fr. 2me Sér.* iv. 201, 1, pl. 8, No. 1, f. 1.

Constantina.

17. ZYGÆNA LUDICRA.

Nigra; antennæ nigro-subviolaceæ; alæ anticæ fusco subvirescente tinctæ, longitudinaliter rubro trivittatæ et bimaculatæ, venis fimbriaque nigris; posticæ rubræ fimbria nigra.

Zygæna ludicra, *Lucas, Explor. Scient. de l'Alger. Anim. Artic.* iii. 373, 74. *Atlas, Lép.* pl. 3, f. 1.

Oran.

18. ZYGÆNA MELILOTI.

Alæ anticæ sublanceolatae, subdiaphanae, nitidae, grisescenti-virescentes vel cyanescentes, maculis quinque rubris; posticæ rubrae, margine virescenti-nigro; antennæ clavatae.

Zygæna Meliloti, Ochs. Schmett. von Eur. ii. 43, 11. Boisd. Mon. Zyg. 51, pl. 3, f. 5. Dalm. Act. Holm. 1816, 222. Duponch. Suppl. Hist. Nat. Lép. France, ii. 62, pl. 5, f. 7. Chenu, Enc. d'Hist. Nat. Pap. 249, f. 434. Herr.-Schæff. Samml. Eur. Schmett. Suppl. ii. 35, 23, 1, Zyg. pl. 8, f. 63; pl. 11, f. 78. Eversm. Faun. Volg. Ural. 95, 7.

Zygæna Viciæ, Schr. Faun. Boic. ii. 1, 238, 1405.

Sphinx Viciæ, Bork. Rhein. Mag. i. 638, 15. Illig. N. Ausg. Dess. i. 36; Mag. ii. 40, 2. Fuessl.

Sphinx Loti (Mas), Hübn. Sphing. pl. 17, f. 82. Wien. Verz. 8, 45, Fam. G. No. 3.

Sphinx Meliloti, Esp. Schmett. ii. 10, pl. 39. Cont. 14, 1—8.

Sphinx Lonicerae (Var.), Esp. Schmett. ii. pl. 25. Sup. 7, f. 3.

Agrumenia Meliloti, Hübn. Verz. Schmett. 116, 1259.

Wings slightly transparent, narrow, lanceolated.

Germany. France. Switzerland. Sweden.

Var. Zygæna Buglossi, Escher, Duponch. Suppl. Hist. Nat. Lép. Fr. ii. 138, pl. 12, f. 4.

Zurich.

Var. Zygæna Stentzii, Freyer, Beitr. Schmett. 278.

Zygæna Meliloti, *Var. Stentzii*, Herr.-Schæff. Samml. Eur. Schmett. Suppl. 1, Zyg. pl. 12, f. 86, 87.

a—d. From M. Becker's collection.

e. *Var.* Fore wings with six spots; the sixth nearest the tip, towards the hind border, diffused, not quite separate from the fifth.

19. ZYGÆNA DAHURICA.

Nigro-cyanea; alæ anticæ maculis quinque rubis, duabus basilibus, duabus discalibus, postica majore, unaque subapicali; posticæ rufæ, nigro marginatæ. Long. alar. 14 lin.

Zygæna Dahurica, *Boisd. Icones*, 57, pl. 54, f. 7. *Duponch. Suppl. Hist. Nat. Lép. France*, ii. 134, pl. 12, f. 2. *Herr.-Schæff. Samml. Eur. Schmiett. Suppl. 1*, *Zyg.* pl. 9, f. 68.
Sphinx (Zygæna) Dahurica, *Freyer, Beitr. Schmiett.* vi. 39, 913, pl. 506, f. 2.

Fore wings with red spots at the base, a little one beyond, two obliquely near the tip, hind one near the border.

Antennæ more clavate, and fore wings more rounded at the tips than those of *Z. Meliloti*.

Daouria, Eastern Siberia.

20. ZYGÆNA EXULANS.

Alæ anticæ subdiaphanæ, cyanescentes, interdum venis albidis notatæ, maculis quinque inæqualibus, subtus concoloribus; posticæ rubræ, margine grisescente-cyaneo; antennæ subclavatæ, cyaneæ; pedes lutei; corpus pilosissimum.

Zygæna exulans, *Ochs. Schmiett. von Eur.* ii. 40, 9. *Dalm. Act. Holm.* 1816, 222, 5. *Duponch. Suppl. Hist. Nat. Lép. France*, ii. 57, pl. 5, f. 5. *Boisd. Mon. Zyg.* 47, pl. 3, f. 3. *Zett. Ins. Lapp.* 919, 1. *Chenu, Enc. d'Hist. Nat. Pap.* 249, f. 436. *Freyer, Beitr. Schmiett.* iii. 13, pl. 200, 343, f. 2. *Herr.-Schæff. Samml. Eur. Schmiett. Suppl.* ii. 37, 28.
Sphinx exulans, *Hübner. Sphing.* 81, 19, pl. 20, f. 101 (Fœm.); pl. 2, f. 12 (Mas). *Esp. Schmiett.* ii. pl. 41. *Cont.* 16, f. 1, 2. *Reiner & Hohewarth, Botan. Reis.* 265, pl. 6, f. 2.
Lycastes exulans, *Hübner. Verz. Schmiett.* 118, 1823.

Var. *Corpus et pedes nigra, pilosa; antennæ breves, clava crassa; alæ anticæ fusco-virescentes subdiaphanæ, maculis quinque rubris, basali exteriore elongata; posticæ rubræ, margine fusco-diaphano latiore.*

Zygæna Vanadis, *Dalm. Act. Holm.* 1816, 223, 6.

Wings slightly transparent. Body very hairy.

Pyrenees. Mountains of France, of Savoy, of Switzerland, and of the Tyrol. Alps of Styria and of Carinthia, at the height of 6000 to 7000 feet. Lapland.

a, b. From M. Becker's collection.

c. ———?

21. ZYGÆNA BITORQUATA.

Alæ anticæ flavo-pulverulentæ, apice margineque nigro-chalybeis, maculis quinque suborbiculatis rubro-auranteis, (tribus ad basim sæpe confluentibus); posticæ rubræ, chalybeo marginatæ; corpus splendide viride; prothorax bicinctus; humeri et pedes flava.

Zygæna bitorquata, Ménétr. *Voy. au Caucase*, 259. Herr.-Schæff. *Samml. Eur. Schmett. Suppl. ii.* 48.

Zygæna exulans, Var. ?

Caucasus.

22. ZYGÆNA CYNARÆ.

Alæ anticæ subrotundatæ, subdiaphanæ, virescentes aut obsolete cærulescentes, maculis quatuor rubris (interdum media et basali coadunatis); posticæ rubræ, margine cæruleo-grisescente; abdomen cingulo rubro; antennæ nigræ, clavatæ; thorax villosus; pedes albid.

Zygæna Cynaræ, Ochs. *Schmett. von Eur. ii.* 42, 10. *Boisd. Mon. Zyg.* 49, pl. 3, f. 4. *Chenu, Enc. d'Hist. Nat. Pap.* 248, f. 433. Herr.-Schæff. *Samml. Eur. Schmett. Suppl. ii.* 35, 22. *Treits. Suppl. x.* 105. *Duponch. Suppl. Hist. Nat. Léop. France, ii.* 60, pl. 5, f. 6. *Eversm. Faun. Volg. Ural.* 95, 5.

Sphinx (Zygæna) Cynaræ, Freyer, *Beitr. Schmett. ii.* 106, 582, pl. 350, f. 1; iii. 28, 21, pl. 14, f. 3.

Sphinx Veronicæ, Bork. *Rhein. Mag. i.* 304, 121.

Sphinx Viciæ, var., Bork. *Rhein. Mag. i.* 639, 15.

Sphinx Cynaræ, Esp. *Schmett. ii.* 42, 10, pl. 37. *Cont.* 2, 12, f. 2, 3, 4. *Hüb. Sphing.* 82, 24, pl. 17, f. 80.

Sphinx Millefolii, Esp. pl. 43. *Cont.* 18, f. 1, 2. Bork. *Eur. Schmett. ii.* 239, 13, 14.

Lycastes Cynaræ, Hüb. *Verz. Schmett.* 118, 1284.

Wings slightly transparent. Abdomen with a red band.

Eastern France. Austria. Hungary. South Russia. Neighbourhood of Dresden and of Rome.

a, b. Tuscany. Presented by M. Passerini.

c—i. From M. Becker's collection.

23. ZYGÆNA ROMEO.

Alæ anticæ nigro-cyanæ, apice valde rotundatæ, maculis quinque rufis, 1a et 2a basalibus, 3a minima 4aque discalibus, 5a sub-apicali; alæ posticæ rufæ, margine nigro intus sinuato. Long. alar. 14 lin.

Zygæna Romeo, *Lefebvre, Duponch. Suppl. Hist. Nat. Lép. France*, ii. 131, pl. 12, f. 1.

Lower basal spot of the fore wings much shorter than the other; third like a dot, close in front of the fourth, which like the fifth is rather large. Border of the hind wings broader than that of *Z. Cynaræ*.

Sicily.

a—c. ———? From M. Becker's collection.

24. ZYGÆNA ACHILLEÆ.

Alæ anticæ cyaneo-virescentes vel cyaneo-lutescentes, maculis quinque rubris, subtus confluentibus, solitaria majori et securiformi; posticæ rubræ, margine cyaneo; prothorax humerique pilis albis inducti.

Zygæna Achilleæ, *Ochs. Schmett. von Eur.* ii. 30, 6. *Boisd. Mon. Zyg.* 42, pl. 3, f. 1, 2. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. 34, 21, 1, *Zyg.* pl. 9, f. 64, 67. *Chenu, Enc. d'Hist. Nat. Pap.* 248, f. 432. *Bork. Rhein. Mag.* i. 306, 125; 643, 21. *Treits. Suppl.* 104. *Duponch. Suppl. Hist. Nat. Lép. France*, ii. 46, pl. 4, f. 6, *a, b.* *Eversm. Faun. Volg. Ural.* 94, 3.

Zygæna Loti, *Fabr. Sp. Ins.* ii. 158, 3; *Ent. Syst.* iii. 1, 387, 3.

Zygæna Fulvia? *Fabr. Gen. Ins. Mant.* 275, 1, 2; *Mant. Ins.* ii. 101, 3.

- Sphinx Zygæna Fulvia?* *Gmel. ed. Syst. Nat.* i. 5, 2391, 107.
Sphinx Scabiosæ, *De Vill. Ent. Lin.* ii. 111, 48.
Sphinx Viciæ, *Hüb. Sphing.* 79, 8, (*Sph. Loti*, *Mas*), pl. 2, f. 11.
Wien. Verz.
Sphinx Bellidis, *Hüb. Sphing.* 78, 7, pl. 2, f. 10, (*Fœm.*) *Bork. Schmett.* ii. 43, 15; 122, 14.
Sphinx Triptolemus, *Hüb. Sphing.* 78, 6, pl. 20, f. 96. (*Larv.*)
Sphinx Amsteinii, *Fuessl. Mag.* i. pl. 1, f. 4, B, a, b, f. 1, a, b.
Sphinx Loti, *Illig. N. Ausgs.* 1, B, 38, 3.
Sphinx Filipendulæ, var., *Scop. Ent. Carn.* 479, 190.
Sphinx Achilleæ, *Esp. Schmett.* ii. 189, pl. 25. *Suppl.* 7, f. 1, a, b.
Engr. Pap. d'Eur. iii. 60, pl. 99, f. 141, a—d. *Bork. Eur. Schmett.* ii. 21, 14; 121, 13.
Sphinx Bellidis, *Bork. Eur. Schmett.* ii. 43, 15; 122, 14.
Sphinx Serpylli, *Bork. Eur. Schmett.* ii. 166, 13, 14, 6.
Lycastes Bellidis, *Hüb. Verz. Schmett.* 118, 1281.
Lycastes Loti, *Hüb. Verz. Schmett.* 118, 1282.
Var. Sphinx (Zygæna) Cytisi, *Freyer, Beitr. Schmett.* ii. 116, 285, pl. 164, f. 4.
Sphinx (Zygæna) Triptolemus, *Freyer, Beitr. Schmett.* i. 28, 22, pl. 14, f. 4; ii. 114, 283, pl. 164, f. 1, 2.
Zygæna Triptolemus, *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. 32, 15, 1, *Zyg.* pl. 2, f. 7, 12.

Wings slightly transparent. Hind spot securiform.

France. Germany. Switzerland.

a—f. From M. Becker's collection.

Var. ? Nigra; *antennarum clava crassa*; *alæ anticæ nigro-cinereæ, semidiaphanæ, vittis duabus basalibus, antica brevi postica longa, maculaque rotunda antica discali, rufis*; *posticæ rufæ, nigro ciliatæ*.

Zygæna Contaminei, *Boisd. Icon. Hist.* ii. 48, pl. 53, f. 4, 5.
Duponch. Suppl. Hist. Nat. Léop. France, ii. 51, pl. 5, f. 2.
Herr.-Schæff. Schmett. Eur. i. *Eversm. Faun. Voly. Ural.* 95, 6.

Sphinx (Zygæna) Contaminei, *Freyer, Beitr. Schmett.* vi. 39, 912, pl. 506, f. 1.

Sicily.

a—c. Pyrenees. From M. Becker's collection.

25. ZYGÆNA JANTHINA.

Alæ cæruleo-plumbeæ, maculis quinque rubris, posteriore liturata ; posticæ rubræ, margine tenuiore cyaneo.

Zygæna Janthina, *Boisd. Mon. Zyg.* 45, pl. 8, f. 7. *Icones*, 51, pl. 53, f. 8. *Duponch. Suppl. Hist. Nat. Lép. France*, ii. 143, pl. 12, f. 7.

Zygæna Achilleæ, *Var.*, *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* 11, 34.

Wings slightly transparent. Hind spot with a little oblique prolongation.

Basses-Alps. Montpellier. Pyrenees.

26. ZYGÆNA CONCINNA.

Alæ angustatæ, anticæ fusco-virescentes, punctis quinque rubris ; posticæ rubræ ; margine exteriore nigro ; corpus nigro-virescens ; palpi, thoracis maculæ, anus et pedes flava ; abdomen cingulo lato rubro. Var. β. Punctis flavis ; segmentis ventralibus omnibus flavo marginatis. Var. γ. Alis anticis minus angustatis, punctis rubris ; segmentis ventralibus anticis flavo punctatis, intermediis rubro marginatis.

Zygæna concinna, *Dalm. Anal. Ent.* 49 ; *Lepid. Extr.* 23. *Boisd. Mon. Zyg.* 74.

Z. Caffræ paullo minor. Corpus nigrum, flavo maculatum ; alæ anticæ nigro-fuscæ, lineola basali maculisque quatuor flavis ; posticæ rufæ nigro marginatæ ; abdomen rufo cinctum.

Zygæna pulchella, *Boisd. Guér. Icon. Règne Anim.* pl. 86 bis, f. 3. *Texte*, 499.

Wings slightly transparent. Prothorax and anus yellow. Abdomen with a red band.

a. South Africa. Presented by Dr. A. Smith.

b. Cape. From M. Drège's collection.

27. ZYGÆNA LONICERÆ.

Alæ anticæ cyaneæ aut virescenti-cyaneæ ; maculis quinque majoribus rubris, subtus concoloribus ; posticæ rubræ, margine cyaneo, subsinuato, et ad angulum analem decrescente ; antennæ clavatæ, atræ ; pedes dilutiores, nigri.

Zygæna Loniceræ, Ochs. *Schmett. von Eur.* ii. 49, 13. *God. Pap. de France*, iii. 134, pl. 22, f. 4. *Dalm. Act. Holm.* 1816, 221, 2. *Boisd. Mon. Zyg.* 56, pl. 3, f. 8. *Eversm. Faun. Volg. Ural.* 96, 9. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. 36, 24.

Zygæna Fulvia? *Fabr. Sp. Ins.* ii. 158, 3; *Mant.* ii. 101, 3.

Zygæna Loti, *Fabr. Ent. Syst.* iii. 387. *Donov. ? Nat. Hist. Brit. Ins.* ix. 67, pl. 319. *Haw. Lep. Brit.* 74.

Sphinx Zygæna Fulvia? *Gmel. ed. Syst. Nat.* i. v. 2391, 107.

Sphinx graminis, *De Vill. Ent. Lin.* ii. 115, 61. *Engr. Pap. d'Eur.* iii. pl. 98, f. 138, a—d.

Sphinx Loniceræ, *Esp. Schmett.* ii. pl. 24; *Suppl.* 6, 1, a, b. *Hüb. Sphing.* 80, 14, pl. 2, f. 7. *Larv. Lepid.* 2. *Sphing.* 1. *Pap. B, c, f.* 1, a, b. *Bork. Schmett.* ii. 20, 13; 121, 12; 161, 13. *Haw. Prod.* 6.

Thermophila Loniceræ, *Hüb. Verz. Schmett.* 118, 1271.

Anthrocera Loti, *Steph. Ill. Brit. Ent. Haust.* i. 109. *Wood, Ind. Ent.* ii. pl. 4, f. 4. *West. & Humph. Brit. Moths*, i. 30, pl. 8, f. 18.

Anthrocera Trifolii, *Wood, Ind. Ent.* ii. pl. 4, f. 3.

Sphinx (Zygæna) Loniceræ, *Freyer, Beitr. Schmett.* v. 108, 794, pl. 446.

Wings deep blue. Spots large, separate.

North Europe. Switzerland. Pyrenees.

a—bb. England. From Mr. Stephens' collection.

cc. England. Presented by W. Wing, Esq.

dd, ee. England. From Mr. Foxcroft's collection.

ff—ll. England.

m. Chamounix.

n—t. From M. Becker's collection.

28. ZYGÆNA TRIFOLII.

Alæ anticæ cyaneæ, maculis quinque rubris (duabus mediis confluentibus), subtus concolores; posticæ rubræ, margine latiori cyaneo; antennæ clavatæ; thorax et abdomen cyanea; pedes dilutiores atrii.

- Zygæna Trifolii*, Ochs. *Schmett. von Eur.* ii. 47, 12. *Dalm. Act. Holm.* 1816, 222, 3. *Boisd. Mon. Zyg.* 54, pl. 3, f. 7. *Duponch. Suppl. Hist. Nat. Lép. France*, ii. 71, pl. 8, f. 1. *Freyer, Beitr. Schmett.* pl. 200. *Chenu, Enc. d'Hist. Nat. Pap.* 249, f. 4361. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. 37, 25. *Eversm. Faun. Volg. Ural.* 96, 8.
- Phalæna*, &c.? *Merian, Pap.* 198.
- Papilio pratensis*, &c., *Ray, Hist. Ins.* 134, 2.
- Sphinx pratorum*, *De Vill. Ent. Lin.* ii. 114, 60. *Engr. Pap. d'Eur.* iii. 136, pl. 97, f. 136, a—e.
- Sphinx Trifolii*, *De Vill. Ent. Lin.* ii. 113, 54. *Esp. Schmett.* 223, 11, pl. 34. *Cont.* 9, f. 45. *Hübner. Sphing.* 80, 16, pl. 17, f. 79; pl. 29, f. 134, 135. *Bork. Eur. Schmett.* 26, 18; 123, 164, 17.
- Thermophila Trifolii*, *Hübner. Verz. Schmett.* 118, 1277.
- Anthrocera Trifolii*, *Steph. Ill. Brit. Ent. Haust.* i. 108.
- Sphinx (Zygæna) Trifolii*, *Freyer, Beitr. Schmett.* 14, pl. 200, 345, 4.
- Sphinx (Zygæna) Triptolemus*, *Freyer, Beitr. Schmett.* 28, pl. 14, f. 4.
- Var. Anthrocera Meliloti*, *Steph. Ill. Brit. Ent. Haust.* i. 108. *Westw. & Humph. Brit. Moths*, i. 29, pl. 6, f. 15, 16.
- Var. Sphinx Orobi*, *Hübner. Sphing.* pl. 29, f. 133.
- Thermophila Orobi*, *Hübner. Verz. Schmett.* 118, 127, b.
- Sphinx Orobi*, *Frey. Schmett.*
- Var. Maculis mediis discretis. Sphinx Glycyrrhizæ*, *Hübner. Sphing.* pl. 38, f. 138.
- Sphinx (Zygæna) Glycyrrhizæ*, *Frey. Beitr. Schmett.* ii. 116, 284, pl. 164, f. 3.
- Zygæna Trifolii, Var. Minoides (maculis confluentibus)*, *De Selys, Cat. Lép. Belg.* 23, 34.
- Var. Zygæna Loti*, *Haw. Lep. Brit.* 74.

Wings deep blue. The two median spots generally confluent. France. Piedmont. Austria. Hungary. Franconia. Switzerland. Sweden.

- a—aa.* England. From Mr. Stephens' collection.
bb. England. Presented by J. W. Duck, Esq.
cc—ee. England. From Mr. Foxcroft's collection.
ff—ii. England.
gg. England. *Var.* Basal and middle spots confluent.
hh. England. *Var.* Spots confluent, yellow; hind wings yellow.
ii, jj. From M. Becker's collection.

b b b b b. Wings with six more or less rounded spots.

Thermophila, *p.*, et *Anthiliaræ*, et *Acaces*, *Hübner. Verz. Schmett.* 117.

29. ZYGÆNA MEDICAGINIS.

Alæ anticæ cyaneo-virescentes, maculis sex minoribus (interdum quinque), nigro submarginatis; posticæ rubræ; margine latissimo, nigro-violaceo; antennæ apice lutescentes; pedes nigri, femoribus pallidioribus.

Zygæna Medicaginis, *Ochs. Schmett. von Eur.* ii. 61, 16. *Boisd. Mon. Zyg.* 66, pl. 4, f. 5. *Duponch. Suppl. Hist. Nat. Lép. France*, ii. 73, pl. 6, f. 5, 6. *Chenu, Enc. d'Hist. Nat. Pap.* 250, f. 439. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. 41, 38.

Sphinx Medicaginis, *Hübner. Sphing.* 82, 21, pl. 4, f. 20.

Sphinx transalpina, *Esp. Schmett.* ii. 142, 196, pl. 16, f. *Bork. Eur. Schmett.* ii. 15, 120, 10. *De Brunner, Lépid. Pedemont.* 98, 195.

Thermophila Medicaginis, *Hübner. Verz. Schmett.* 118, 1267.

Antennæ with yellow tips. Wings with small spots. Hind wings with broad borders,

Piedmont. South Italy. Sicily. Carinthia. Illyria.

a. From M. Becker's collection.

Var. Alæ omnes concolores, cyaneæ, micantes; anticæ maculis sex (vel quinque) sanguineis nigro subinctis; posticæ puncto rubro basique rubro radiata; prothorax concolor.

Zygæna Stœchadis, *Ochs. Schmett. von Eur.* ii. 83, 22. *Boisd. Mon. Zyg.* 82, pl. 5, f. 3.

Zygæna Stœchadis, *Boisd. ? Icones*, ii. 71, pl. 55, f. 4. *Treits. Suppl.* x. 1, 109. *Duponch. Suppl. Hist. Nat. Lép. France*, ii. 78, pl. 7, f. 2. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. 47, 56, 1, *Zyg.* pl. 5, 35—39; pl. 6, 45; pl. 13, f. 90. *Var.*

Sphinx (Zygæna) Stœchadis, *Freyer, Beitr. Schmett.* ii. 138, 628, f. 1, 4.

Catalonia.

a—d. From M. Becker's collection.

e, f. ——— ?

Herrich-Schæffer supposes *Z. Stœchadis* of Ochsenheimer to be distinct from that of Boisduval.

Var. Sphinx Lavandulæ, *Hübner. Sphing.* 79, 11, pl. 4, f. 24.

Sphinx Stœchadis, *Bork. Rhein. Magaz.* i. 628, 7.

Anthilaria Lavandulæ, *Hübner. Verz. Schmett.* 117, 1263.

Hind wings red from the base to the middle.

Iles d'Hyères. Piedmont. Spain.

Var. Zygæna Boisduvalii, *Costa.*

Maculis omnibus flavis.

Calabria.

30. ZYGÆNA AUSTRALIS.

Nigro-viridis; alæ anticae maculis quinque rubris, duabus subæqualibus basalibus, duabus approximatis aut connexis discalibus, antica minore, unaque subapicali; alæ posticæ rubræ, margine sat lato nigro.

Zygæna australis, *MSS.*

Resembles *Z. Loniceræ*, but the antennæ are shorter, the basal spots are more contiguous to each other, as are also the discal spots; the black border of the hind wings is broader. Length of the body 5—6 lines; of the wings 13—15 lines.

a—c. Spain. From M. Becker's collection.

31. ZYGÆNA CHARON.

Alæ anticæ cyaneæ nitidæ, maculis sex minutis, rubris, nigro submarginatis; posticæ rubræ, margine latiori nigro-cyaneo; antennæ subclavatæ,

- Zygæna Charon*, *Boisd. Mon. Zyg.* 65, pl. 4, f. 4. *Duponch. Suppl. Hist. Nat. Lép.* ii. 90, pl. 8, f. 1. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. 40, 36, 1, *Zyg.* pl. 9, f. 69, 70.
Sphinx Charon? *Hübner. Sphing.* pl. 4, f. 21.
Thermophila Charon, *Hübner. Verz. Schmett.* 119, 1268.
Zygæna Medicaginis, var. ? *Treit.*
Zygæna Charon? *Herr.-Schæff. Schmett. Eur.* 69, 70.

Antennæ with blue tips. Wings with spots of moderate size. Hind wings with broad borders.

Piedmont, Pyrenees, Corsica, Sicily, Spain.

a. Tuscany. Presented by M. Passerini.

32. ZYGÆNA HIPPOCREPIDIS.

Alæ anticæ atro-cæruleæ aut virescentes, maculis sex cinnabarinis, subtus omnino confluentibus; posticæ rubræ, margine cyaneo; antennæ clavatæ, apice albæ; abdomen haud cingulatum.

- Zygæna Hippocrepidis*, *Ochs. Schmett. von Eur.* ii. 63, 17. *God. Pap. de France*, iii. 136, pl. 32, 5. *Boisd. Mon. Zyg.* 76, pl. 4, f. 7. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. 41, 37, 1, *Zyg.* pl. 7, f. 54—56.
Sphinx Loti? *De Vill. Ent. Lin.* ii. 113, 55.
Sphinx Loti, *Esp. Schmett.* ii. 224, pl. 35. *Cont.* 10, f. 1. *Borkh. Eur. Schmett.* ii. 28, 19. 123, 18. *Hübner. Sphing.* pl. 5, f. 32, (Fœm.)
Sphinx Hippocrepidis, *Hübner. Sphing.* pl. 17, f. 83, (Mas).
Sphinx Hippocrepidis, (var. fœm.) *Hübner. Sphing.* pl. 79, 12; (larva), *Larv. Sphing.* b. c., f. 2, a, b, c.
Sphinx Astragali, *Bork. Rhein. Magaz.* i. 631, 12.
Zygæna Cytisi, *God. Pap. de France*, pl. 22, f. 6.
(Var.) *Thermophila Hippocrepidis*, *Hübner. Verz. Schmett.* 118, 1272.
Anthrocera Hippocrepidis, *Steph. Ill. Brit. Ent. Haust.* i. 109, 5.
Sphinx (Zygæna) Hippocrepidis, *Freyer, Beitr. Schmett.* i. 157, 159, pl. 86. f. 2, 3.

Sphinx (*Zygæna*) *Cytisi*, *Freyer, Beitr. Schmett.* ii. 116, 285. pl. 164, f. 4.

Var. *Zygæna Hopferi, Bischoff.*

Sphinx (*Zygæna*) *Astragali, Freyer, Beitr. Schmett.* 452.

Antennæ with white tips. Hind wings red-lead colour, with hardly any border. Var. Fore wings with white spots. Hind wings yellow.

France, Germany. Switzerland. Pyrenees.

a, b. From M. Becker's collection.

c. France.

d.

33. ZYGÆNA TRANSALPINA.

Alæ anticæ atro-cyanæ aut virescentes, maculis sex rubris (sæpe connatis); posticæ rubræ, margine lato, sinuato, cyaneo; abdomen haud cingulatum; antennæ clavatæ, nigro-cyanæ.

Zygæna transalpina, Ochs. Schmett. von Eur. ii. 60, 15. *Boisd. Mon. Zyg.* 63, pl. 4, f. 3. *Treits. Suppl.* x. 106. *Duponch. Suppl. Hist. Nat. Léop. France*, ii. 64, pl. 6, f. 1. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. 42. 39, 1, *Zyg.* pl. 8, f. 61, 62.

Sphinx transalpina, *Hübner. Sphing.* 81, 20, pl. 3, f. 15, (Mas), 19 (Fœm.)

Sphinx *Filipendulæ major, Esp. Schmett.* ii. 19, pl. 41. *Cont.* 16, f. 4, (Mas).

Thermophila transalpina, Hübner. Verz. Schmett. 118, 1274.

Zygæna Ochsenheimeri, Zeller.

Zygæna Filipendulæ, var. ?

Antennæ with white tips. Spots of the wings confluent. Hind wings with hardly any border.

Piedmont, Italy, Sicily.

a, b. From M. Becker's collection.

c. From Dr. Friwaldsky's collection.

34. ZYGÆNA FILIPENDULÆ.

Alæ anticæ cyanæ aut virides, nitidæ, fusco ciliatæ, maculis sex rubris; posticæ rubræ; margine tenui nigro-cyaneo; abdomen haud cingulatum; antennæ clavatæ.

- Zygæna Filipendulæ*, *Fabr. Ent. Syst.* iii. 386. *Vieweg. Verz. Schmett.* i. 231. *Haw. Lepid. Brit.* 73. *Ochs. Schmett. von Eur.* ii. 54, 14. *God. Pap. de France*, iii. 127, pl. 22, f. 2. *Lam. Hist. Nat. Anim. sans Vert.* iv. 6, 1. *Dalm. Act. Holm.* 1816, 221, 1. *Boisd. Mon. Zyg.* 59, pl. 4, f. 1. *Curt. Brit. Ent.* xii. pl. 547. *Guér. Icon. Règne Anim. Ins.* pl. 84 bis, f. 4. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. 42, 40. *Chenu, Enc. d'Hist. Nat. Pap.* 249, f. 437. *Eversm. Faun. Volg. Ural.* 96, 10. *Crochard, ed. Règ. An.* 258. *Atlas*, pl. 148, f. 2.
- Phalæna*, &c., *Merret, Pinax*, 198. *Mouff. Ins.* 966, 97, fig. ult. *Goed. Ins.* ii. pl. 31. *List. Goed. (Augl.)* 47, f. 37, (Lat.) 100, f. 37. *Petiv. Mus.* 36, 330. *Albin, Ins.* pl. 82, f. C. D. *Jonst. Ins.* pl. 7, f. 3. *Reaum. Ins.* i. pl. 12, f. 14—17; ii. pl. 2, f. 2. *Merian, Ins. Eur.* ii. 27, pl. 17, f. 67. *Roes. Ins.* 1. *Phal.* 2, pl. 57. *Wilk. Pap.* 46, pl. 1, a, 1. *Harr. Ins.* ii. pl. 1, f. c—h.; *Vade Mecum*, 15. *Deg. Ins.* vii. 591, 1, pl. 44, f. 1. *Poda, Ins. Mus. Græc. Sulz. Gesch. Ins.* pl. 15, f. 91.
- Sphinx Adscita Aries*, *Retz. Deg. Gen.* 35.
- Sphinx Aries*, *Geoff. Hist. Ins. France*, ii. 88, 13.
- Sphinx Filipendulæ*, *Linn. Syst. Nat.* ii. 805, 34; *Faun. Suec.* 1097. *Fabr. Sp. Ins.* ii. 157, 1; *Mant. Ins.* ii. 101, 1. *Wien. Verz.* 45, 4. *Müll. Faun. Lepid. Silesiaca. Illig. N. Ausg. dess.* i. 39, 4. *Barbut, Gen. Ins. Linn.* 181, pl. 10, f. 34. *Berk. Syn. Nat. Hist. Brit.* i. 132. *Donov. Nat. Hist. Brit. Ins.* i. 17, pl. 6. *Stew. Elem. Nat. Hist.* ii. 140. *Turt. Syst. Nat.* iii. 182. *Fuessli, Ent. Mag.* pl. 1, f. 2, 3. *Engram. Pap. d'Eur.* iii. pl. 97, f. 137, a—f. *Esp. Schmett.* ii. 138, 233, pl. 16, f. a—e.; pl. 36. *Cont.* ii. f. 8. *Hüb. Sphing.* 80, 15, pl. 5, f. 31, (Fœm.) *Larv. Pap.* b, c. f. 1, c, d. *Bork. Eur. Schmett.* ii. 12, 119, 160, 9.
- Sphinx Zygæna Filipendulæ*, *Gmel. ed. Syst. Nat.* i. 5, 2390, 34.
- Thermophila Filipendulæ*, *Hüb. Verz. Schmett.* 118, 1273.
- Var. *Sphinx Cytisi*, *Hüb. Sphing.* pl. 4, f. 26.
- Thermophila Cytisi*, *Hüb. Verz. Schmett.* 118, 1275.
- Var. *Sphinx Chrysanthemi*, *Borkh. Eur. Schmett.* ii. 166, 21, 22. *Rhein. Mag.* i. 647, 28. *Hüb. Sphing.* 80, pl. 3, f. 17. *Esp.*
- Var. *Zygæna Mannii*, *Herr.-Schæff. Schmett. Eur.* 109, 110.
- Anthrocera Filipendulæ*, *Steph. Ill. Brit. Ent. Haust.* i. 110, 6.
- Var. *Anthrocera Hippocrepidis*, var. *Steph. Ill. Brit. Ent. Haust.* i. 109, 5. *Wood, Ind. Ent.* pl. 4, f. 6.

Spots of the wings separate. Hind wings with hardly any border.

Europe, including the whole of Russia.

a—ce. England. From Mr. Stephens' collection.

ff. England. From Mr. Stephens' collection. Var. Basal and middle spots confluent.

gg. England. From Mr. Stephens' collection. Var. Spots and hind wings yellow.

hh, ii. England. Presented by Edw. Shepherd, Esq.

jj—mm. England. From Mr. Foxcroft's collection.

nn—pp. England.

qq. Pyrenees. Presented by M. A. Pierret.

This specimen is ticketed *Z. Angelicæ*, but does not apparently differ from *Z. Filipendulæ*.

rr, ss. From M. Becker's collection.

tt, vv. France.

35. ZYGÆNA ANGELICÆ.

Alæ anticæ cyaneæ, maculis quinque rubris (sex in quibusdam), subtus confluentibus; posticæ rubræ margine nigro; antennæ apice luteæ.

Zygæna Angelicæ, Ochs. Schmett. von Eur. ii. 67, 18. Boisd. Mon. Zyg. 61, pl. 4, f. 2. Duponch. Suppl. Hist. Nat. Lép. France, ii. 66, pl. 6, f. 2. Zeller, Ent. Zeit. Stett. v. 43. Chenu, Enc. d'Hist. Nat. Pap. 250, f. 438. Herr.-Schæff. Samml. Eur. Schmett. Suppl. ii. 37, 26.

Sphinx Angelicæ, Hübn. Sphing. pl. 26, 120, 121.

Thermophila Angelicæ, Hübn. Verz. Schmett. 118, 1270.

Antennæ with yellow tips. Spots of the wings separate. Hind wings with hardly any border.

Prussia, Austria, Hungary. Tyrol.

36. ZYGÆNA DORYCNII.

Alæ anticæ virides, punctis sex coccineis; posticæ coccineæ, margine latissimo cyaneo; abdomen cingulo supra coccineo.

Zygæna Dorycnii, Ochs. Schmett. von Eur. ii. 69, 19; iv. 37. Boisd. Mon. Zyg. 72; Icones, 68, pl. 55, f. 8. Treits. Suppl. x. 1, 107. Duponch. Suppl. Hist. Nat. Lép. France, ii. 136, pl. 12, f. 3. Herr.-Schæff. Samml. Eur. Schmett. Suppl. ii. 39, 33, 1, Zyg. pl. 3, f. 24, 25.

Sphinx (*Zygæna*) *Dorycnii*, *Freyer, Beitr. Schmett.* iii. 120, 456, pl. 278, f. 3.

Abdomen with a red band above.

South Russia. Styria.

a, b. From M. Becker's collection.

The characters of these two specimens agree partly with those of *Z. Peucedani*, partly with those of *Z. Dorycnii*, and the latter may be a mere variety of the former.

37. ZYGÆNA PEUCEDANI.

Alæ anticæ nigro-cyanææ aut virescentes, maculis sex rubris, subtus confluentibus; posticæ rubræ, margine latiori, cyaneo; abdomen cingulo rubro; antennæ nigro-cyanææ, apice albicantes; pedes et thorax nigro-cyanei.

Zygæna Peucedani, *Ochs. Schmett. von Eur.* ii. 70, 20. *God. Pap. de France*, iii. 130, pl. 22, f. 3. *Boisd. Mon. Zyg.* 68, pl. 4, f. 6. *Chenu, Enc. d'Hist. Nat. Pap.* 250, f. 440.

Sphinx Peucedani, *Engr. Pap. d'Eur.* iii. 56, pl. 98, f. 139, a—e, pl. 122, f. 138, e. (var.) *Esp. Schmett.* ii. 191, pl. 25. *Suppl.* 7, f. 2. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. 39, 32, 1, *Zyg.* pl. 7, f. 52, 53. *Hüb. Sphing.* 82, 22, pl. 16, f. 75, 76. *Borkh. Eur. Schmett.* ii. 16, 120, 161.

Sphinx Zygæna Filipendulæ, (var.) *Gmel. ed. Syst. Nat.* i. 5, 2391.

Zygæna Filipendulæ, (var.) *Fabr. Ent. Syst.* iii. 1, 286, 1.

Thermophila Peucedani, *Hüb. Verz. Schmett.* 117, 1266.

Zygæna Hippocrepidis, *Herr.-Schæff.* 52, 53.

Var. 1. *Alæ anticæ cyanææ, maculis quinque rubris; posticæ rubræ, nigro marginatæ; abdomen cingulo rubro.*

Sphinx Athamanthæ, *Esp. Schmett.* ii. 4, pl. 37. *Cont.* 12, f. 5, 6.

Sphinx Veronicæ, *Borkh. Eur. Schmett.* ii. 162, 13, 14, a. 238.

Var. 2. *Alæ anticæ cyanææ, punctis sex flavis; posticæ flavæ, nigro-cyaneo marginatæ; abdomen cingulo flavo.*

Zygæna Æacus, *Fabr. Mant.* ii. 102, 7; *Ent. Syst.* iii. 389, 9.

Sphinx Æacus, *Hüb. Sphing.* 82, 22, pl. 3, f. 18. *Wien. Verz.* 45, *fam. G.* 8.

Sphinx Zygæna Æacus, *Gmel. ed. Syst. Nat.* i. 5, 2392.

Thermophila Zygæna Æacus, *Hüb. Verz. Schmett.* 117, 1265, 109.

Var. 3. *Alæ anticæ cyaneæ, maculis binis baseos flavis, tribus disci albis; posticæ flavæ, macula alba limboque cyaneo; abdomen cingulo flavo.*

Sphinx *Eacus*, *Engr. Pap. d' Eur.* iii. 69, pl. 102, f. 148, a, b. *Esp. Schm.* ii. 217, pl. 33. *Cont.* 8, f. 1.

Abdomen with a red band above and below.

France, Germany, Tyrol. Italy.

a, b. From M. Becker's collection.

38. ZYGÆNA EPHIALTES.

Alæ anticæ cyaneæ aut atro-cyaneæ, maculis quatuor disci albis, binis baseos rubris; posticæ cyaneæ, macula alba; abdomen cingulo rubro; antennæ subbreves clavatæ, nigro-cyaneæ.

Zygæna Ephialtes, *Fabr. Sp. Ins.* ii. 158, 5; *Mant. Ins.* ii. 102, 6; *Syst. Ent.* 551, 3. *Vieweg. Rossi, Faun. Etrusc.* ii. 16, 366. *Ochs. Schm.* von *Eur.* ii. 77, 21. *Boisd. Mon. Zyg.* 85, pl. 5, f. 5, 6. *Panz. Treits.* x. *Suppl.* 108. *Duponch. Suppl. Hist. Nat. Lép. France*, ii. 68, pl. 6, f. 3, 4. *Zeller, Ent. Zeit. Stett.* v. 46. *Herr.-Schæff. Samml. Eur. Schm.* *Suppl.* ii. 48, 59, 1, *Zyg.* pl. 13, f. 91. *Chenu, Enc. d'Hist. Nat. Pap.* 252, f. 447. *Eversm. Faun. Volg. Ural.* 97, 11.

Sphinx *Ephialtes*, *Linn. Syst. Nat.* i. 2, 806, 36. *Engr. Pap. d' Eur.* iii. 63, pl. C. f. 144, a, b. *Esp. Schm.* ii. 148, pl. 22, f. 3. *Borkh. Eur. Schm.* ii. 10, 118, 7; 155, 6. *Naturf. Fuessl. Lang. Verz.*

Sphinx *Zygæna Ephialtes*, *Gmel. ed. Syst. Nat.* i. 5, 2392, 36.

Zygæna Coronillæ, *Fabr. Ent. Syst.* iii. 388, 8. *Schæff.*

Zygæna falcatæ, *Schr. Faun. Boic.* ii. 1, 237, 1404.

Sphinx *Coronillæ*, *Illig. Lang. Verz. Bork. Wien. Verz. Fuessl. Schæff. Hübn. Sphing.* pl. 3, f. 13. *Esp.* ii. 219, pl. 33. *Cont.* 8, f. 3, 4.

Var. 1. *Alæ anticæ atro-cæruleæ, nitidæ, maculis binis, orbiculatis et puncto disci albis; ocello baseos rubro, intra circulum album, maculaque oblonga incrassiore, margine rubra; posticæ puncto unico albo, margine pallidiores; abdomen cingulo carmineo.*

Sphinx *falcatæ*, *Wien. Verz.* 45, fam. G. 6. *Illig. Hübn. Sphing.* pl. 5, f. 33, (Fœm.)

Sphinx Ephialtes, *Hüb. Sphing.* 83.

Zygæna Ephialtes, *Panz. Faun. Germ.* 5, 20.

Æacus Ephialtes, *Hüb. Verz. Schmett.* 117, 1264.

Sphinx Medusa, *Pall. Reis. Anth. Z.* i. 67.

Var. 2. *Alæ omnes utrinque cærulescentes nitidæ; anticæ maculis quatuor disci albis, binis baseos luteis; posticæ macula majora et adjacente minori albis; abdomen cingulo luteo.*

Zygæna Ephialtes, var. *Fabr. Mant.* ii. 102, 6.

Zygæna Coronillæ, *Fabr. Ent. Syst.* iii. 388, 8.

Sphinx Ephialtes, var. *Hüb. Sphing.* 83, 26.

Sphinx Coronillæ, *Hüb. Sphing.* pl. 3, f. 13. *Engr. Pap. d'Eur.* iii. 66, 67, pl. 101, f. 146, a, b, g, h. *Esp. Schmett.* ii. 218, pl. 33. *Cont.* 8, f. 2.

Var. 3. *Alæ omnes atro-cæruleæ, nitidæ, utrinque concolores; anticæ maculis disci tribus albis, binis baseos luteis; posticæ macula unica alba; abdomen cingulo luteo.*

Sphinx Coronillæ, *Engr. Pap. d'Eur.* iii. pl. 101, f. 146, c, d, e, f. i pl. 102, f. 147, a, b.

Sphinx Trigonellæ, *Esp. Schmett.* ii. 147, pl. 33. *Cont.* 8, f. 3, 4. *Borkh. Eur. Schmett.* ii. 9, 6, 118, 6. *Scriba, Lang. Verz. Schmett.* ii. 78, 622. *Rhein. Mag.* i. 627, 4.

Zygæna Trigonellæ, *Rossi, Faun. Etr. Mant.* ii. 17, 367.

Sphinx Schæfferi, *Fuessl. Mag.* i. 122, 2, 135. *Borkh. Eur. Schmett.* ii. 117, 2. *Naturf.* x. 95, 2.

Wings blue. Fore wings with two basal yellow spots. Abdomen with a yellow band.

Germany. Tyrol. Piedmont, Val d'Aosta, Italy, Russia, Siberia.

a. Polish Ukraine. Presented by Dr. Dowler.

b—e. From M. Becker's collection.

aa. Wings with ocellated spots.

b. Spots more or less encircled with black.

c. Fore wings blue.

Anthilaria, p., et *Eutychia*, *Hüb. Verz. Schmett.* 117, 1262.

39. ZYGÆNA LAVANDULÆ.

Alæ omnes cæruleo-virescentes, micantes; anticæ utrinque maculis quinque rubris, nigro cinctis; posticæ macula unica vel duabus rubris; prothorax albus; antennæ clavatæ nigro-cyanæ.

Zygæna Lavandulæ, *Fabr. Ent. Syst.* iii. 1, 387, 4. *Coqueb. Illustr. Icon.* i. pl. 7, f. 2. *Ochs. Schmett. von Eur.* ii. 84, 23. *God. Pap. de France*, iii. 144, pl. 22, f. 10. *Pet. Instit. Entom.* ii. 509, 12. *Boisd. Mon. Zyg.* 83, pl. 5, f. 4. *Chenu, Enc. d'Hist. Nat. Pap.* 250, f. 441. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. 40, 58, 1, *Zyg.* pl. 5, f. 41, 42.

Sphinx Lavandulæ, *De Vill. Ent. Lin.* ii. 114, pl. 4, f. 20. *Engr. Pap. d'Eur.* iii. pl. 101, f. 145, a, b. *Esp. Schmett.* ii. 221, pl. 34. *Cont.* 9, f. 2. *Borkh. Eur. Schmett.* ii. 11, 119, 8.

Sphinx Spicæ, *Hüb. Sping.* 79, 10, pl. 4, f. 25, (Mas).

Var. *Alarum anticarum maculæ lineæ duplici rufa connexa.*

Zygæna consobrina, *Germ. Faun. Eur. Fasc.* 16, pl. 23.

Zygæna Lavandulæ, var. *consobrina*, *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* 1, *Zyg.* pl. 5, f. 43.

Anthilaria Spicæ, *Hüb. Verz. Schmett.* 117, 1262.

Hind wings with two red spots. Prothorax white.

South France. Spain.

a—c. ——— ?

c. c. Hind wings red.

40. ZYGÆNA RHADAMANTHUS.

Alæ anticæ cyaneo-virescentes, maculis sex rubris, circulo atro marginatis; posticæ rubræ, margine cyaneo; antennæ breves, valde clavatæ; thorax pilis albis inductus.

Zygæna Rhadamanthus, *Ochs. Schmett. von Eur.* ii. 86, 24. *God. Pap. de France*, iii. 79, 9, pl. 22, f. 9. *Boisd. Mon. Zyg.* 91, pl. 5, f. 8. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. 43, 41, 1, *Zyg.* pl. 3, f. 21, 22. *Chenu, Enc. d'Hist. Nat. Pap.* 251, f. 442.

Sphinx Rhadamanthus, *Esp. Schmett.* ii. 13, pl. 40. *Cont.* 15, f. 1, 2. *Borkh. Rhein. Mag.* i. 644, 22. *Hüb. Sping.* 79, 9, pl. 4, f. 23.

Eutychia Rhadamanthus, *Hüb. Verz. Schmett.* 117.

Var. *Zygæna cingulata*, Herr.-Schæff. Schmett. Eur. 21, 22, 1260.

Fore wings with six separate spots.

South France. Spain.

a. Pyrenees. Presented by M. A. Pierret.

b, c. From M. Becker's collection.

d. ——— ?

41. ZYGÆNA OXYTROPIS.

Alæ anticæ cyaneo-virescentes, maculis sex miniatæ, nigro marginatis (duabus apicalibus connatis), subtus omnibus confluentibus; posticæ miniatæ margine nigro; prothorax, humeri corpusque subvillosa nigra.

Zygæna Oxytropis, Boisd. Mon. Zyg. 89, pl. 5, f. 7. Treits. Suppl. x. 109. Duponch. Suppl. Hist. Nat. Léop. France, ii. 80, pl. 7, f. 3. Herr.-Schæff. Samml. Eur. Schmett. Suppl. ii. 43, 42, 1, Zyg. pl. 3, f. 19, 20.

Sphinx (Zygæna) Oxytropis, Freyer, Beitr. Schmett. 111, 28, 20, pl. 14, f. 2.

Fore wings with the two hind spots confluent.

Piedmont, Italy.

42. ZYGÆNA CAFFRA.

Alæ anticæ fusæ, punctis quinque sanguineis nigro cinetis; posticæ rubræ, margine fusco; humeri, orbiculi oculatorum palpique sanguinei; abdomen cingulo rubro.

Zygæna Caffra, Fabr. Sp. Ins. 159, 9; Mant. Ins. ii. 102, 11; Ent. Syst. iii. 390, 13. Boisd. Mon. Zyg. 80, pl. 5, f. 1.

Sphinx Caffra, Linn. Syst. Nat. ii. 806, 37; Mus. Lud. Utr. 362. Cram. Pap. Exot. 217, pl. 394, f. F. Gron. Zooph. 330.

Sphinx Zygæna Caffra, Gmel. ed. Syst. Nat. i. 5, 2393, 37.

Sphinx, &c., Engr. Pap. d'Eur. iii. pl. 100, f. 143.

Eutychia Caffra, Hübn. Verz. Schmett. 117, 1261.

Palpi and prothorax red. Abdomen with a red band.

South Africa.

a, b. Cape. From Drège's collection.

c. S. Africa. From Mr. Pamplin's collection.

d. ——— ?

b b. Spots encircled with white or yellow.

c. All the spots separate.

Agrumenæ et Lycastæ, p., *Hüb. Verz. Schmett.* 116.
Circumflæ, p.

43. ZYGÆNA OLIVIERI.

Alæ anticæ cyanæ aut virescentes, nitidæ, maculis tribus rubris, subocellatis; posticæ rubræ, margine tenuiore, cyaneo; antennæ clavatæ; prothorax et abdominis cingulum rubra.

Zygæna Olivieri, *Boisd. Mon. Zyg.* 98, pl. 6, f. 4. *Ménétr. Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. 44, 46, 1, *Zyg.* pl. 12, f. 89, 103.

Sphinx (Zygæna) Dsidilia, *Kindermann. Freyer, Beitr. Schmett.* vi. 136, 1037, pl. 568, f. 4. *Alæ anticæ maculis tribus rufis albo cinctis, una basali, una discali transversa, unaque subapicali; abdomen apicem versus rufo cinctum*

Fore wings with three red spots. Prothorax red. Abdomen with a red band.

Syria. Caucasus.

44. ZYGÆNA SCOVITZII.

Alæ anticæ viridi-chalybæ nitidæ, maculis quinque purpureis, flavo marginatis, macula apicali intus sub-bifurca, alteris minoribus ovatis; posticæ purpureæ, violaceo marginatæ; abdomen cingulo integro rubro; pedes ænei, antice flavescents.

Zygæna Scovitzii, *Ménétr. Boisd. Icon.* 76. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. 48.

South Russia.

45. ZYGÆNA FRAXINI.

Alæ anticæ maculis quatuor rufis albo cinctis, una basali, duabus discalibus transversis, unaque subapicali; abdomen apicem versus rufo cinctum.

Zygæna Fraxini, *Ménétr. Herr.-Schæff. Samml. Eur. Schmett. Suppl.* 1, *Zyg.* f. 102.

Zygæna Oribasus, Herr.-Schæff. *Samml. Eur. Schmiett. Suppl.* 1, *Zyg.* pl. 4, f. 31, 34. Kol. *Mel. Ent.* f. 31, 34. Zeller, *Ent. Zeit. Stett.* ix. 372.

Sphinx (*Zygæna*) *Carniolica*, Freyer, *Beitr. Schmiett.* 350.

Sphinx (*Zygæna*) *Oribasus*, Freyer, *Beitr. Schmiett.* vi. 135, 1034, pl. 568, 1.

Zygæna Sedi, var., Herr.-Schæff. *Samml. Eur. Schmiett. Suppl.* ii. 43.

Lenkoran, Caspian Sea. Persia.

46. ZYGÆNA ANTHYLLIDIS.

Alæ anticæ virescentes, maculis sex rubris; posticæ rubræ, margine tenui nigro; prothorax et abdominis cingulum rubra; antennæ subclavatæ.

Zygæna Anthyllidis, Boisd. *Mon. Zyg.* 78, pl. 4, f. 8. Duponch. *Suppl. Hist. Nat. Lép. France*, ii. 76, pl. 7, f. 1. Chenu, *Enc. d'Hist. Nat. Pap.* 247, f. 427. Herr.-Schæff. *Samml. Eur. Schmiett. Suppl.* ii. 40, 35, 1, *Zyg.* pl. 1, f. 4; pl. 13, f. 92.

Sphinx (*Zygæna*) *Anthillidis*, Freyer, *Beitr. Schmiett.* v. 27, 693, pl. 398, f. 3.

Fore wings with six similar red spots. Prothorax red. Abdomen with a red band.

South Spain. Pyrenees, as high as the snow-line, with *Z. exulans*. a—c. Pyrenees. Presented by M. A. Pierret.

47. ZYGÆNA OCCITANICA.

Alæ anticæ cyaneo-virescentes, nitidæ, maculis quinque rubris, albo valde marginatis, sexta transversa, alba, lunari; posticæ ruberrimæ, margine cyaneo; prothorax et humeri albidi; abdomen cingulo lato, ruberrimo; antennæ clavatæ.

Zygæna occitanica, Ochs. *Schmiett. von Eur.* ii. 95, 26. God. *Pap. de France*, iii. 149, pl. 22, f. 12. Petag. *Inst. Ent.* ii. 509, 13. Boisd. *Mon. Zyg.* 97, pl. 6, f. 3. Rambur, *Faune Andalus.* pl. 12, f. 10. Herr.-Schæff. *Samml. Eur. Schmiett. Suppl.* ii. 46, 52, 1, *Zyg.* pl. 11, f. 84.

Sphinx occitanica, *De Vill. Ent. Lin.* ii. 114, 59, pl. 4, f. 21.

Sphinx Phacæ, *Hübner. Sphing.* 84, 31, pl. 22, f. 106 (Mas), 107 (Fœm.)

Agrumenia Phacæ, *Hübner. Verz. Schmett.* 116, 1256.

Fore wings with six spots; hind spot white, semilunar.

Languedoc. Spain. Syria. Barbary.

a, b. Spain. Presented by Benjamin Frend, Esq.

c, d. From M. Becker's collection.

48. ZYGÆNA ROGNADA.

Z. Onobrychis affinis; *alarum anticarum macula apicalis major, non semilunaris, albo tantum marginata, macula præcedente proxima aut etiam confluens.*

Zygæna Rognada, *Kindermann, Boisd. Ann. Soc. Ent. Fr. 2me Sér. vi. Bull. xxx. 11.*

Distinguished from *Z. Onobrychis* by its amaranthine red spots and hind wings, and by the spot at the tip of each fore wing, which is larger and not semilunar, bordered only behind with white, and much closer or sometimes even confluent with the preceding spot.

Odessa or Caucasus.

49. ZYGÆNA ONOBRYCHIS.

Alæ anticæ viridi- aut cyaneo-nitentes, maculis sex rubris albo marginatis, postica transversa lunulata; posticæ rubræ margine nigro-cyaneo; prothorax et humeri albi; antennæ clavatæ; abdomen cingulo rubro nonnunquam obsoleto.

Zygæna Onobrychis, *Fabr. Ent. Syst.* iii. 1, 390, 12. *Panz. Faun. Ins. Germ.* 32, 23. *Lam. Hist. Nat. Anim. sans Vert.* iv. 64. *Ochs. Schmett. von Eur.* ii. 87, 25. *God. Pap. de France*, iii. 58. *Eversm. Faun. Volg. Ural.* 97, 12, 146, pl. 22, f. 11. *Boisd. Mon. Zyg.* 92, pl. 5, f. 1, 2. *Herr.-Schæff. Samml. Schmett. Eur.* 26—28; *Suppl.* ii. 46, 53, 1, *Zyg.* pl. 4, f. 26—28, pl. 11, f. 81, 82.

Zygæna Carniolica, *Fabr. Sp. Ins.* ii. 159, 8; *Mant. Ins.* 102, 10; *Gen. Ins. Mantis.* 275, 5. *Rossi, Faun. Etrusc.* ii. 167, 1069.

Sphinx Carniolica, Scop. Ent. Carn. 189, 478.

Sphinx Onobrychis, Engr. Pap. d'Eur. iii. 57, pl. 99, f. 148, a—h.
Esp. Schmett. ii. pl. 42. Cont. 17, f. 2—4. Borkh. Eur.
Schmett. ii. 18, 120, 161, 12.

Sphinx Carniolica, Vieweg, Verz. Schmett. Schwartz. Raupenkal.

Sphinx cruenta, Pall. Reis. ii. 94.

Sphinx Caffra, Esp. Schmett. ii. 152, pl. 17, f. 3, a, b.

Sphinx Meliloti, Hübn. Sphing. (mas), 83, 27, pl. 6, f. 38.

Sphinx Hedysari, Hübn. Sphing. pl. 6, f. 36 (mas); pl. 5, f. 35
(fœm.); Larv. Sph. i. Pap. b, a, c, f. 2, a, b.

Sphinx Astragali, Hübn. Sphing. 84, 11, 29, pl. 6, f. 27, (fœm.)

Sphinx Zygæna Carniolica, Gmel. ed. Syst. Nat. i. 5, 2392, 112.

Agrumenia Phacæ, Hübn. Verz. Schmett. 116, 1256.

Agrumenia Meliloti, Hübn. Verz. Schmett. 116, 1259.

Agrumenia Hedysari, Hübn. Verz. Schmett. 116, 1258.

Sphinx virginea, Manip. Ins. Taurin. 192.

Sphinx (Zygæna) Astragali, Freyer, Beitr. Schmett. v. 117, 808,
pl. 452.

Sphinx (Zygæna) Carniolica, Freyer, Beitr. Schmett. ii. 107, 583,
pl. 350, f. 2.

Var. *Zygæna Diniensis*, Herr.-Schæff. Samml. Eur. Schmett. Suppl.
1, Zyg. f. 111, 112.

Var. 1. *Alæ anticæ cyaneæ, nitidæ, maculis quinque flavis, singulis albido marginatis, ultima lunari; posticæ flavæ.*

Sphinx flaveola, Esp. Schmett. ii. 229, pl. 36. Cont. 11, f. 1. Hübn.
Sphing. pl. 3, f. 14, (fœm.) Bork. Eur. Schmett. ii. 31, 22;
124, 21.

Var. *Zygæna Onobrychis*, var. *Iberica*, Kolenati, Mel. Ent. Zeller,
Ent. Zeit. Stett. ix. 372. *Viridi-cærulea, alæ anticæ macula
apicali lineari arcuata coccinea nunquam albo cincta.*

Iberia.

Fore wings with six spots, the posterior one red and semilunar.

Europe. Kislar, near the Caspian Sea. Georgia, North America.

a—f. From M. Becker's collection.

g.

50. ZYGÆNA SEDL

*Alæ anticæ nigro-cyaneæ, maculis tribus magnis pallide rubris,
flavo submarginatis; posticæ rubræ, nigro marginatæ; pro-
thorax et humeri albi.*

Zygæna Sedi, Fabr. Mant. Ins. ii. 101, 4; Ent. Syst. iii. 388, 5.
Ochs. Schmett. Eur. ii. 100; iv. 166. Treits. Suppl. x. f.

112. *Duponch. Suppl. Hist. Nat. Lép. France*, ii. 139, pl. 12, f. 5. *Herr.-Schæff. Samml. Schmett. Eur. Suppl.* ii. 43, 43, 1, Zyg. pl. 6, f. 46, 47. *Chenu, Enc. d'Hist. Nat. Pup.* 251, f. 443. *Eversm. Faun. Ural. Volg.* 98, 13.
- Sphinx *Zygæna Sedi*, *Gmel. ed. Syst. Nat.* i. 5, 2391, 108. *Freyer, Beitr. Schmett.* ii. 107, 584, pl. 350, f. 3.
- Sphinx *Sedi*, *Hüb. Sphing.* 89, 136. *Bork. Eur. Schmett.* ii. 165, 17, 18; *Rhein. Mag.* i. 647, 26.
- Lycastes Sedi*, *Hüb. Verz. Schmett.* 118, 1279.
- Zygæna Onobrychis*, Var. 2, *Boisd. Mon. Zyg.*

Fore wings with six spots, the posterior one red and semilunar.
France. Germany. Italy.

51. ZYGÆNA ORANA.

Nigro-cyanea; alæ anticæ maculis sex rufis cinereo-flavescente marginatis, 1a et 2a basulibus oblongis vena mediana disjunctis, 3a, 4a, et 5a ovatis vel rotundatis discalibus, 6a subapicali transversa semilunata. Long. alar. 11 lin.

Zygæna Orana, *Duponch. Suppl. Hist. Nat. Lép. France*, ii. 145, pl. 12, f. 8.

Oran.

cc. All the spots confluent.

Circumfluæ, p., *Hesychiæ*, *Hüb. Verz. Schmett.* 116.

52. ZYGÆNA FAUSTA.

Alæ anticæ cyaneæ, maculis quinque cinnabarinis, confluentibus, flavo cinctis; posticæ cinnabarinæ, limbo sinuato, nigro; prothorax, anus, abdominisque cingulum cinnabarinæ; pedes lutescentes; thorax albo lineatus.

Zygæna Fausta, *Fabr. Sp. Ins.* ii. 163, 29; *Mant. Ins.* ii. 105, 35; *Ent. Syst.* iii. 397, 37. *Lam. Hist. Nat. Anim. sans Vert.* iv. 6, 5. *Ochs. Schmett. von Eur.* ii. 96, 27. *God. Pap. de France*, iii. 150, pl. 22, f. 13. *Boisd. Mon. Zyg.* 101, pl. 6, f. 6. *Freyer, Beitr. Schmett.* vi. 154, 1066, pl. 578. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. 45, 48.

Sphinx *Fausta*, *Linn. Syst. Nat.* i. 2, 807, 42. *Sulz. Gesch. Ins.* pl. 20, f. 7. *Fuess. Verz. Schweitz. Ins. Ent. Mag.* pl. 1, f. H. *Lang. Verz. Schmett. Illig. Mag. Ins. Schrank. Hüb. Sphing.* 84, 32, pl. 5, f. 27, (fœm.); *Larv. Lepid. Sph.* i.

Pap. B, a, b, f. 3, a—d. Esp. Schmett. ii. 156, pl. 18, f. 1, a, b.

Bork. Eur. Schmett. ii. 30, 21; 124, 165, 20. Wien. Verz.

Sphinx Zygæna Fausta, Gmel. ed. Syst. Nat. i. 5, 2396, 42.

Sphinx béliér (var.), Geoff. Hist. Ins. ii. 89.

Sphinx de la bruyère, Engr. Pap. d'Eur. iii. 61, pl. 100, f. 142, c, d.

Hesychia Fausta, Hübn. Verz. Schmett. 116, 1254.

Prothorax red. Abdomen with a red band and a red tip.

South Europe, and some parts of North Europe.

a—g. Pyrenees. Presented by M. A. Pierret.

h—k. From M. Becker's collection.

l. South France.

m—o. ———?

53. ZYGÆNA HILARIS.

Alæ anticæ nigro-cyanææ aut virescentes, maculis quinque cinnabarinis, flavo marginatis, confluentibus; posticæ cinnabarinæ, margine sinuato cyaneo; prothorax humerique albid; abdomen haud cingulatum.

Zygæna hilaris, Ochs. Schmett. von Eur. ii. 101, 30. Boisd. Mon.

Zyg. 99, pl. 6, f. 5. Treits. Suppl. x. 111. Duponchel, Suppl.

Hist. Nat. Lép. France, ii. 84, pl. 7, f. 5. Chenu, Enc. d'Hist.

Nat. Pap. 251, f. 445. Herr.-Schæff. Samml. Eur. Schmett.

Suppl. ii. 45, 47.

Sphinx hilaris, Hübn. Sphing. 123.

Hesychia hilaris, Hübn. Verz. Schmett. 116, 1253.

Prothorax whitish. Abdomen without a red band.

Provence, Dauphiné, Spain, Portugal.

a—c. From M. Becker's collection.

54. ZYGÆNA ALGIRA.

Z. hilari affinis; alarum anticarum maculæ rufæ lineis flavis non connexæ; posticæ marginibus posticis rufis.

Zygæna Algira, Duponch. Suppl. Hist. Nat. Lép. France, ii. 86, pl.

7, f. 6. Boisd. Icon. 75. Herr.-Schæff. Samml. Eur. Schmett.

Suppl. ii. 45, 51.

Like *Z. hilaris*, but the red spots of its fore wings are not connected by yellow lines, and the hind borders of these wings are red, not yellow.

Algiers.

55. ZYGÆNA FAUSTINA.

Alæ anticæ nigro-virides, maculis sex rubris confluentibus, luteo marginatis; posticæ rubræ, limbo æquali nigro; prothorax ruber; pedes nigro-virides; abdomen cingulo rubro subtus non coeunte.

Zygæna Faustina, Ochs. *Schmett. von Eur.* ii. 99, 28. *Boisd. Mon. Zyg.* 103. *Duponch. Suppl. Hist. Nat. Léop. France*, ii. 141, pl. 12, f. 6. *Rambur, Faune Andalus.* pl. 12, f. 7. *Chenu, Enc. d'Hist. Nat. Pap.* 251, f. 444. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. 45, 50.

Sphinx Faustina, Hübn. *Sphing.* pl. 31, f. 141, 142.

Hesychia Faustina, Hübn. *Verz. Schmett.* 116, 125.

Abdomen with a red band which is not complete beneath.

Portugal. Spain.

56. ZYGÆNA BÆTICA.

Prothorax rufus; abdomine postice rufo fasciatum; alæ anticæ basi maculisque quatuor rufis albo marginatis, macula 1a 2aque connexis, 3a antica, 4a arcuata subapicali.

Zygæna Bætica, Ramb. *Faune Andalus.* pl. 12, f. 9. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. 45, 49, 1, *Zyg.* pl. 11, f. 79, 80.

Zygæna Faustina, var. ?

South Spain.

57. ZYGÆNA LÆTA.

Alæ anticæ cyaneæ aut virescentes, maculis confluentibus, rubro-miniaceis, pallidulis, immarginatis; posticæ miniaceæ, margine nigro-cyaneo; prothorax, humeri, et abdominis cingulum latissimum rubra.

Zygæna læta, Ochs. *Schmett. von Eur.* ii. 100, 29. *Boisd. Mon. Zyg.* 104, pl. 6, f. 7. *Duponch. Suppl. Hist. Nat. Léop. France*, ii. 82, pl. 7, f. 4. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. 44, 445. *Chenu, Enc. d'Hist. Nat. Pap.* 251, f. 446. *Eversm. Faun. Ural. Volg.* 98, 13.

Hesychia læta, Hübn. *Verz. Schmett.* 116, 1252.

Sphinx (Zygæna) læta, Freyer, *Beitr. Schmett.* iii. 12, 342, pl. 200, f. 1.

Sphinx de la bruyère (var.) *Engr. Pap. d'Eur.* iii. 61, pl. 100, f. 142, a, b.

Sphinx læta, *Hübner. Sphing.* 82, 33, pl. 6, f. 34, 35. *Esp. Schmett.* ii. 36, pl. 46. *Cont.* 21, f. 2. *Borkh. Rhein. Magaz.* i. 646, 25.

Spots of the wings small, minaceous. Abdomen with a very broad red band.

Austria. Hungary.

a—e. From M. Becker's collection.

f. From Dr. Friwaldsky's collection.

58. ZYGÆNA LÆTIFICA.

Palpi nigri; alæ anticæ maculis 1a et 2a, 3a et 4a, 5a et 6a conjunctis, flavo cinctis.

Zygæna lætifica, *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. 44, 45, 1, *Zyg.* pl. 12, f. 88.

The following species are not grouped.

59. ZYGÆNA AMPLA.

Mas. Nigra, gracilis; caput, thorax et pedes albo guttata; antennæ albo cinctæ; abdomen coccineo quadrfasciatum; alæ anticæ fusæ flavo quinquemaculatæ, posticæ flavæ, nigro marginatæ et ex parte fasciatæ.

Male. Black, rather slender. Head with two white dots in front, with two beneath, and with one on each side behind. Antennæ with a white band above beyond the middle. Thorax and pectus with white dots on each side. Wings broad, especially the hind wings. Fore wings dark brown, with five yellow spots, one near the base, the other four forming two transverse slightly oblique lines; the second and third spots in the middle, almost united; the fourth and the fifth near the tips, smaller and more apart. Hind wings yellow, with black borders except on the inner side; this border is widest at the tip and emits two branches towards the disk on the fore border, and one on the hind border. Abdomen with four crimson bands. Legs with white dots. Length of the body 7 lines; of the wings 18 lines.

a. Port Natal. From Mr. Stevens' collection.

60. ZYGÆNA CASCHMIRENSIS.

Alæ anticæ obscure virescentes, maculis quinque magis subrotundatis pallide flavis; posticæ rubræ margine fasciaque transversa nigris; prothorax flavus; abdomen rubro cinctum. Long. alar. 12—15 lin.

Zygæna Caschmirensis, Kollar, *Kaschmir von Von Hügel*, iv. 459, 1, pl. 19, f. 6.

Caschmir.

Var. ? Blackish green. Antennæ dark blue, white above at the tips. Thorax with a yellow spot on each side in front. Fore wings with five yellow spots; one near the base, the other four placed in two oblique lines; the first pair in the middle, the second near the tips. Hind wings crimson, with black borders, with a slightly oblique black band a little beyond the middle, and sometimes with two black spots towards the fore border and nearer the base. Abdomen with a crimson band, near the tip in the female, broader and extending to the tip in the male. Length of the body $4\frac{1}{2}$ —6 lines; of the wings 16—19 lines.

Var. β. Band of the hind wings interrupted.

a—d. North India. From Mr. Stevens' collection.

e. North India. From Mr. Argent's collection.

f, g. Nepaul. Presented by Major General Hardwicke.

61. ZYGÆNA LAPHRIA.

Alæ anticæ maculis tribus rufis, una basali, una semidivisa discali, unaque subapicali.

Zygæna Laphria, Freyer, *Beitr. Schmett.* vi. 135, 1035, pl. 568, f. 2.

Zygæna Laphria, Herr.-Schæff. *Schmett. Eur.* f. 198.

Caucasus.

62. ZYGÆNA GANIMEDES.

Alæ anticæ maculis tribus rufis albo cinctis, 1a basali, 2a 3aque conjunctis, 2a maxima, 3a subapicali; abdomen rufum.

Zygæna Ganimedes, Freyer, *Beitr. Schmett.* vi. 136, 1036, pl. 568, f. 3. Herr.-Schæff. *Samml. Eur. Schmett. Suppl.* vi. *Zyg.* pl. 14, f. 100.

Amasia.

63. ZYGÆNA ZULEIMA.

Alæ anticæ subdiaphanæ, plumbeo-cærulescentes, fasciis tribus longitudinalibus, quarum media extrema parte recurva, rubris; posticæ rubro-miniacæ; antennæ cyaneo-nigricantes; caput et corpus nigra, villosa.

Zygæna Zuleima, Donzel, *Ann. Soc. Ent. Fr.* vi. 22, pl. 1, f. 8.
Algeria.

64. ZYGÆNA ORION.

Antennæ clava magna obtusa; abdomen sine cingulo rubro; alæ anticæ maculis 3a et 5a separatiss, 3a elongato-ovali; posticæ limbo latissime æquilate nigricante.

Zygæna Orion, Keferstein, *Herr.-Schæff. Samml. Eur. Schm. Suppl.* ii. 33, 16, 1, *Zyg.* pl. 1, f. 3.

South Europe.

65. ZYGÆNA CELEUS.

Nigro-cyanea; corpus breviter squamatum; alæ anticæ obtusæ.

Zygæna Celeus, Kaden; *Herr.-Schæff. Samml. Eur. Schm. Suppl.* ii. 38, 29, 1, *Zyg.* pl. 6, f. 48, 49.

Sicily.

66. ZYGÆNA BARBARA.

Alæ anticæ maculis cinnabarinis, 6a lunata, separata.

Zygæna Barbara, *Herr.-Schæff. Samml. Eur. Schm. Suppl.* ii. 47, 55, 1, *Zyg.* pl. 4, f. 29, 30.

Algiers, or the Balearic Isles.

67. ZYGÆNA CONTAMINEI.

Antennæ clava magna, obtusa; abdomen rufo non cingulatum; alæ anticæ macula 3a nulla; posticæ limbo tenue nigro.

Zygæna Contaminei, *Boisd. Icon.* pl. 53, f. 4, 5. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. 33, 17, 1, *Zyg.* pl. 1, f. 1.

Pyrenees.

68. ZYGÆNA MEDITERRANEA.

Antennæ clava brevī obtusa crassa ; alæ anticæ maculis sex, 5a et 6a interdum contiguīs at non omnino conjunctis.

Zygæna Mediterranea, *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. 38, 30.

South Spain.

69. ZYGÆNA CENTAURÆ.

Alæ anticæ subdiaphanæ, maculis 5a et 6a conjunctis, margine anteriore luteo ; pedes extus fulvi.

Zygæna Centauræ, *Fisch. Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. 39, 31, 1, *Zyg.* pl. 8, f. 57, 58.

Sphinx (Zygæna) Cynaræ, var., *Freyer, Neue Beitr. Schmett.* pl. 350.

South Russia.

70. ZYGÆNA URALENSIS.

Cinerascens ; alæ anticæ obtusæ, maculis 2a cum 4a, 3a cum 5a lineâ tenui conjunctis ; posticæ apice late cinereæ.

Zygæna Uralensis, *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. 34, 20, 1, *Zyg.* pl. 12, f. 85.

Ural Mountains.

71. ZYGÆNA FORMOSA.

Nigra ; antennæ valde clavatæ ; prothorax rufus ; abdomen apicem versus rufo cinctum ; alæ anticæ maculis tribus rufis albo cinctis, 1a basali marginem posticum non attingente 2a 3aque connexis apud medium contractis ; alæ posticæ rufæ margine tenui rufo.

Zygæna formosa, *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* vi. *Zyg.* pl. 14, f. 99.

72. ZYGÆNA XANTHOGRAPHÆ.

Alæ anticæ maculis flavis.

Zygæna Xanthographa, *Keferstein, Germ. Faun.* 16, 22. *Herr.-Schæff. Samml. Eur. Schmiett. Suppl.* ii. 48, 57, 1, *Zyg.* pl. 5, f. 40.

South Italy.

73. ZYGÆNA LATIPENNIS.

Zygæna latipennis, *Herr.-Schæff. Samml. Eur. Schmiett. Suppl.* f. 105.

74. ZYGÆNA MANNERHEIMII.

Zygæna Mannerheimii, *Charding, Rev. Ent. Silberm.* iv. 194, pl. 37. *Herr.-Schæff. Samml. Eur. Schmiett. Suppl.* f. 104.

Siberia.

75. ZYGÆNA KIESENWETTERII.

Nigro-viridis; thorax canescens; alæ anticæ rufo sexmaculatæ, posticæ nigre, sœm. vitta basi furcata apice clavata rufa.

Zygæna Kiesenwetterii, *Herr.-Schæff. Samml. Eur. Schmiett. Suppl.* vi. *Zyg.* pl. 14, f. 96—98.

76. ZYGÆNA WIEDEMANNII.

Zygæna Wiedemannii, *Ménétries, Mem. Acad. Imp. Sci. St. Petersb.* 2me Sér. v. 50, pl. 2, f. 10.

Genus 2. PROCRIS.

Antennæ sublineares, apice aut incrassato, aut cuspidato, subtus in mare distincte bipectinatæ, vel totæ vel ex parte, in fœmina obsoletius dentatæ vel sublævæ. Palpi graciles, clypeo breviores. Alæ vix unquam maculatæ. Tibiæ posticæ solum apice calcaratæ. Larvæ ovatæ, contractæ, tenuissime villosæ, subdepressæ. Pupæ folliculatæ.

Procris, *Fabr. Syst. Gloss.*; *Lam.*; *Latr.*; *Boisd.*; *God.*; *Duponch.*; *Harris*; *Chenu*; *Crochard*; *Herr.-Schæff.*

Papilio, *p., Ray.*

Sphinx, *p., Linn.*; *Donov.*; *Stew.*; *Turt.*; *Esp.*; *Hübner*; *Engr.*

Chrysaöres, *Hübner*.

Zygæna, *p., Fabr.*; *Gmel.*; *Panz.*; *Haw.*

Atychia, *Ochs. Schmett. von Eur.* ii. 10.

Aglaope, *Dalm.*; *Zett.*

Ino, *Leach*; *Steph.*; *Curt.*; *Westw.*

Div. 1. *Lingua spiralis.*

Sub-div. 1. *Antennarum scapus clavatus.*

1. *PROCRIS STATICES.*

Alæ anticæ viridi-cæruleæ, subtus fusæ; posticæ fusæ; antennæ pectinatæ, apice subclavatæ.

Procris Statice, *Fabr. Syst. Gloss.* *Lam. Hist. Nat. Anim. sans Vert.* iv. 4, 1. *Hübner Verz. Schmett.* 119, 1293. *Crochard, ed. Règne Anim.* pl. 148, f. 5. *Chenu, Enc. d'Hist. Nat. Pap.* 242, f. 418. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. 27, 28, 7, pl. 10, f. 75 (var. *micans*), 76 (var. *chrysocephala*).

Papilio, &c., *Ray, Hist. Ins.* 134, 3. *Petiv. Mus.* 35, 329. *Rob. Icon.* pl. 30, f. 1. *Geoffr. Ins. Par.* ii. 129, 40. *Schæff. Icon.* pl. 1, f. 9. *Deg. Ins.* ii. pl. 3, f. 8. *Esp. Pap.* ii. 158, pl. 18, f. 2. *Pap. d'Eur.* iii. 72, pl. 103, f. 150, a—d.

Sphinx Statice, *Linn. Syst. Nat.* ii. 808, 47; *Faun. Suec.* 290, 1098; *It. Wgoth.* 27. *Scop. Ent. Carn.* 190, 481. *Donov. Nat. Hist. Brit. Ins.* vi. 60, pl. 204, f. 2. *Stew. El. Nat. Hist.* ii. 140. *Turt. Syst. Nat.* iii. 191. *Müll. Zool. Dan.* 117, 1346; *Faun. Frid.* 38, 347. *Hübner Sphing.* 766, pl. 1, f. 1. *Larv. Lep.* ii. *Sphing.* i. *Pap. A. B. f. 1, a.* *Wien. Verz.* 46, 10. *Illig. N. Ausg. dess.* i. 46, 10; *Mag.* ii. 43, 10. *Poda, Mus. Græc.* 83, 11. *Fuessl. Mag.* i. 115; ii. 2, 210, 1; iii. 2, 160, 167. *Schweiz. Ins.* 33, 630. *Bork. Eur. Schmett.* ii. 33, 24; 125, 23; 167, 24. *Rhein. Mag.* i. 308, 127. *Lang. Verz.* ii. 79, 627, 628. *Hufnagel, Berl. Mag.* ii. 2, 186, 17. *Naturf.* vii. 106.

Zygæna Globulariæ, *Schr. Faun. Boic.* ii. 1, 242, 1413.

Sphinx Zygæna Statice, *Gmel. ed. Syst. Nat.* i. 5, 2399, 47.

Sphinx Adscita Turcosa, *Retz. Deg. Gen.* 35.

Zygæna Statices, *Fabr. Sp. Ins.* ii. 166, 50; *Mant. Ins.* ii. 107, 62; *Ent. Syst.* iii. 1, 406, 68. *Haw. Lep. Brit.* 73. *Vieweg, Tab. Verz.* i. 26, 7. *Panz. Faun. Germ.* 32, 24. *Rossi, Faun. Etrusc.* ii. 167, 1070; *ed. Illig.* 268, 1070.

Atychia Statices, *Ochs. Schmett. von Eur.* ii. 11, 1.

Aglaope Statices, *Dalm. Act. Holm.* 1816, 224, 1. *Zett. Ins. Lapp.* 920, 1.

Ino Statices, *Leach, Edin. Encycl.* ix. 131. *Samou. Ent. Comp.* 23. *Steph. Ill. Brit. Ent. Haust.* i. 105, 1. *Curt. Brit. Ent.* ix. pl. 396.

Var. Sphinx Geryon, *Hüb. Sphing.* pl. 28, f. 130, 131.

Var. Sphinx micans, *Frey. Schmett.* i. 27, pl. 14, f. 1.

Var. Ino Globulariæ, *Steph. Ill. Brit. Ent. Haust.* i. 106. *Wood, Ind. Ent.* pl. 63, f. 19.

Europe, including Russia. Greece.

a—y. England. From Mr. Stephens' collection.

z—cc. England. Presented by — Merrifield, Esq.

dd, ee. England. From Mr. Foxcroft's collection.

ff—ii. England.

jj—oo. Europe. From M. Becker's collection.

pp. Europe. From M. Friwaldsky's collection.

qq, rr. ———?

Sub-div. 2. Antennarum scapus filiformis.

2. PROCRIS COGNATA.

Procris cognata, *Ramb. Faune Andalus. Herr.-Schæff. Samml. Eur. Schmett.* 94, 95. *Suppl.* 1, *Zyg.* pl. 13, f. 94.

South Spain.

3. PROCRIS GLOBULARIÆ.

Alæ anticae cæruleo-virides; posticæ fusæ; antennæ omnino pectinatae, apice cuspidatæ.

Sphinx Globulariæ, *Hüb. Sphing.* 76, 2, pl. 1, f. 2, 3. *Larv. Lepid.* ii. 1. *Pap. A.* a, b. f. 2, a. ? *Esp. Schmett.* 28, pl. 43. *Cont.* 18, f. 5, 6. *Hüb. Verz. Schmett.*

Atychia Globulariæ, *Ochs. Schmett. von Eur.* ii. 13, 2. *God. Lép. de France, Crép.*

Sphinx Statice minor, *Naturf.* xxviii. 83.

Var. Sphinx chloros, *Hüb. Sphing.* f. 128, 129.

Procris chloros, *Herr.-Schæff. Samml. Eur. Schm. Suppl.* ii. 26,
3. *Læte viridis*; *caput, thorax et alæ anticæ basi cærulea.*

Var. Cæruleo-viridis; *caput aureo-micans*; *antennæ valde pectinatae*; *alæ posticæ fuscae.*

Atychia chrysocephala, *Nickerl, Ent. Zeit. Stett.* vi. 93.

Procris Globulariæ, *Freyer, Beitr. Schm.* 458.

Upper Carinthia.

Procris Globulariæ, *Chenu, Enc. d'Hist. Nat. Pap.* 242, f. 416.

a—c. Europe. From M. Becker's collection.

4. PROCRIS PRUNI.

Alæ anticæ viridi-fuscae; *posticæ nigricantes.*

Sphinx Pruni, *Hüb. Sphing.* 76, 3, pl. 1, f. 4. *Larv. Lép.* ii. *Sphing.* 1. *Pap. A. f.* 3. *Wien. Verz.* 308, 12. *Esp. Schm.* ii. 225, pl. 35. *Cont.* 10, f. 2, 3, 51, pl. 47. *Cont.* 22, f. 6—10. *Pap. d'Eur.* iii. 73, pl. 103, f. 151. *Fuessl. N. Mag.* ii. 2, 210, 2. *Borkh. Eur. Schm.* ii. 33, 25; 126, 24; 167, 25. *Rhein. Mag.* i. 308, 128. *Lang. Verz.* 2, 78, 625, 626; 202, 636. *Illig. N. Ausg. dess.* i. 48, 12.

Zygæna Pruni, *Fabr. Mant. Ins.* ii. 107, 63; *Ent. Syst.* iii. 406, 69. *Gmel. ed. Syst. Nat.* i. 5, 2399, 156. *Schr. Faun. Boic.* ii. 1, 242, 1414. *Vieweg, Tab. Verz.* i. 26, 8. *Rossi, Faun. Etr.* ii. 167, 1071; *ed. Illig.* 269, 1071.

Procris Pruni, *Fabr. Syst. Gloss. Lam. Hist. Nat. Anim. sans Vert.* iv. 5, 2. *Herr.-Schæff. Samml. Eur. Schm. Suppl.* ii. 27, 4. *Atychia Pruni*, *Ochs. Schm. Eur.* ii. 15, 3. *Chenu, Enc. d'Hist. Nat. Pap.* 242, f. 417.

a, b. Tuscany. Presented by Signor Passerini.

c, d. Europe. From M. Becker's collection.

e, f. ——— ?

5. PROCRIS AMPELOPHAGA.

Viridi-ænea ; alæ anticæ fuscæ, angustiores ; posticæ nigricantes parvæ.

Zygæna ampelophaga, Bayle. *Barelle, D. Insetti nocivi, &c.*

Procris ampelophaga, Passerini, *Mem. dell' Academ. dei Geogorfi*, 1830, 4, pl. 1, f. 1—14. *Duponch. Suppl. Hist. Nat. Lép. France*, ii. 92, pl. 8, f. 2. *Herr.-Schæff. Samml. Eur. Schmiett. Suppl. ii. 27, 5.*

Sphinx ampelophaga, Hübn. *Suppl. pl. 34, f. 153, 154.*

Atychia ampelophaga, Treits. x. *Suppl. 100.*

Atychia vitis, Bonelli.

Var. *Sphinx vitis*, Freyer, *Beitr. ii. 12, 69, pl. 68, f. 3.*

Var. *Procris vitis*, Boisd. *Icon. 79, pl. 56, f. 2, 3. Herr.-Schæff. Samml. Eur. Schmiett. Suppl. ii. 27, 6, ii. pl. 10, f. 73, 74. Fusca ; corpus subchalybeum ; alæ anticæ latæ, obtusæ.*

South Europe.

6. PROCRIS COGNATA.

Alæ anticæ, caput, thorax et abdomen viridi-aurata ; alæ anticæ subtilus posticæque cinerascens atque cinerascens fimbriatæ ; antennæ elongatæ exiles viridi aurato-subcyaneo tinctæ dentibusque fuscis ; pedes elongati, femoribus viridi-auratis, tibiis tarsisque cinerascens.

Procris cognata, Lucas, *Explor. Scient. de l'Algér. Anim. Artic. iii. 373, 76, Atlas, Lép. pl. 3, f. 2.*

South Spain. Constantina.

7. PROCRIS CIRTANA.

Viridis ; alæ anticæ nigrescentes, ad basim anticeque viridi tinctæ ; posticæ supra subtilusque anticæ subtilus subnigrescentes ; antennæ viridi-cyanescens, dentibus nigris.

Procris cirtana, Lucas, *Explor. Scient. de l'Algérie, Anim. Artic. iii. 374, pl. 3. f. 3.*

South Spain. Constantina.

8. PROCRIS SEPIUM.

Cinnamomea ; caput, thorax et alæ anticæ basi aureo-viridia.

Procris Sepium, *Boisd. Icon.* 81, pl. 56, f. 1. *Duponch. Suppl. Hist. Nat. Lép. France*, ii. 148, pl. 12, f. 9. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. 26, 2, 11, pl. 10, f. 71, 72.

Lombardy.

9. PROCRIS NEBULOSA.

Nigra ; thorax squamis albicantibus ; alæ hyalinæ, venis flavescen-
tibus, squamis flavido-albis ; abdomen pallide flavum.

Procris nebulosa, *Klug, Guér. Icon. Règne Anim. Ins.* pl. 84 bis,
f. 5, *Texte*, 479.

Cape.

10. PROCRIS MELAS.

Atra ; alæ rotundatæ, utrinque nigre ; anticæ cyaneo submicantes ;
lingua rubra.

Procris melas, *Guérin, Mag. Zool.* 1839 ; *Ins.* pl. 11, f. 3.

Chili.

11. PROCRIS RUFIVENTRIS.

Nigricans ; proboscis et palpi testacea ; antennæ nigre ; abdomen
rufum.

Blackish. Proboscis and palpi testaceous. Antennæ black. Ab-
domen red. Length of the body $2\frac{1}{2}$ lines ; of the wings 4 lines.

a. New Holland. Presented by Capt. Grey.

b. Swan River. Presented by Sir J. Richardson.

12. PROCRIS TRIMACULA.

Cuprea ; caput aureo-viride ; proboscis et palpi ferruginei ; antennæ
nigre, subtus vix pectinatæ ; alæ anticæ fusce maculis tribus
albicantibus ; posticæ nigricantes ; abdomen apice testaceo-
pilosum ; pedes picei.

Bright cupreous. Head golden-green. Proboscis and palpi ferruginous. Antennæ black; hardly pectinated beneath. Thorax except in front brown. Fore wings brown, with three dingy whitish spots, two a little beyond the middle and one near the tip. Hind wings blackish. Tip of the abdomen with testaceous hairs. Legs piceous. Length of the body $2\frac{1}{2}$ lines; of the wings 8 lines.

a. Sidney. From Mr. Lambert's collection.

13. PROCRIS TRICOLOR.

Nigra; caput et prothorax rufo-hirta; proboscis et palpi rufa; pectus plerumque viride; alæ nigricantes; abdomen fasciis ventrique albidis.

Black. Head and prothorax with bright red hairs. Proboscis and palpi red. Pectus mostly green. Wings blackish. Abdomen with whitish bands which are interrupted towards the tip; sides and under side whitish except the tip. Length of the body $2\frac{1}{2}$ — $3\frac{1}{2}$ lines; of the wings 8—10 lines.

a. Van Dieman's Land. Presented by R. Butler, Esq.

b, c. Van Dieman's Land. From Mr. A. J. Smith's collection.

d. Sidney. From Mr. Lambert's collection.

14. PROCRIS APICALIS.

Læte viridi- aut cupreo-metallica; proboscis et palpi nigra; antennæ vix pectinatæ; alæ anticæ subtus posticæ pedesque plerumque fusæ; abdomen cupreum, apice luteum.

Bright metallic green. Proboscis and palpi black. Antennæ hardly pectinated beneath. Fore wings beneath and hind wings and legs mostly brown. Abdomen cupreous; tip luteous. Length of the body 2 — $2\frac{1}{2}$ lines; of the wings 6—7 lines.

Var. β . Thorax cupreous.

a, b. Sidney. From Mr. Lambert's collection.

c. Australia. Presented by the late Earl of Derby.

d. Van Dieman's Land. Presented by E. Doubleday, Esq.

e. ———?

15. PROCRIS PUSILLA.

Obscure viridi-metallica; proboscis, palpi et pedes ferruginea; antennæ cyaneæ subpectinatæ; alæ angustæ, nigricantes?

Dark metallic green. Proboscis, palpi and legs ferruginous. Antennæ blue, slightly pectinated. Wings blackish (or metallic green?), narrow. Length of the body $2\frac{1}{2}$ lines; of the wings 7 lines.

a, b. Venezuela. From Mr. Dyson's collection.

16. PROCRIS DOLENS.

Nigro-viridis; alæ posticæ nigro-cinereæ; mas, caput subtus albidum; antennæ pectinatæ; alæ anticæ nigre; fœm. antennæ serratæ; alæ anticæ nigro-virides.

Dark green. Hind wings grayish black. *Male.* Head whitish beneath. Proboscis testaceous. Antennæ pectinated. Fore wings black. *Fem.* Proboscis piceous. Antennæ serrated. Fore wings dark green. Length of the body $2\frac{1}{2}$ — $2\frac{3}{4}$ lines; of the wings 6—7 lines.

a, b. Van Dieman's Land. From Mr. A. J. Smith's collection.

Div. 2. Lingua spiralis nulla. Fœminæ antennæ breviter bipectinatæ.

17. PROCRIS INFAUSTA.

Nigro-cinerea; prothorax rufus; alæ anticæ fuscae, subdiaphanæ, basi costæ posticæque intus rufæ.

Caput thorace angustius. Oculi extantes. Proboscis nulla. Palpi minimi, fronte disjuncti, clypeum non attingentes; articulus 3us gracilior, fere nudus. Antennæ in utroque sexu bipectinatæ. Thorax collari distincto, fasciculis lateralibus minimis non ante applicatis. Abdomen alas posticas non superans. Alæ quatuor sat latæ angulis rotundatis, fere æquales. Larva brevis contracta, tuberculis fasciculatis. Pupa folliculo ovoideo chartaceo inclusa.

Sphinx infausta, Linn. *Syst. Nat.* 71, 807, 43. *Fuessli, Arch. Ins.* 1, pl. 2, fig. b. *Esp. Pap.* ii. 226, pl. 35, f. 4; *Pap. d'Eur.* iii. 74, pl. 103, f. 152. *De Villers, Ent. Linn.* ii. 109, 43, pl. 4. f. 19. *Borkh. Eur. Schmett.* ii. 32, 23; 125, 22; 167, 23; *Rhein. Mag.* i. 648. *Scriba, Beytr.* iii. 218, pl. 16. f. 12—14. *Lang. Verz.* 78, 623, 624. *Hübner. Sphing.* 77, 4, pl. 1, f. 5. *Larv. Lep.* ii. *Sphing.* 1. *Pap. A.* f. 4.

Zygæna infausta, *Fabr. Sp. Ins.* ii. 163, 31; *Mant. Ins.* ii. 105, 36; *Ent. Syst.* iii. 1, 397, 38.

Sphinx Zygæna infausta, *Gmel. ed. Syst. Nat.* i. 5, 2396, 43.

Bombyx infaustus, *Schr. Faun. Boic.* ii. 1, 252.

Stygia infausta, *Lam. Hist. Nat. Anim. sans Vert.* iv. 3, 4.

Aglaope infausta, *Latr. Nouv. Dict. d'Hist. Nat. God. Hist. Nat. Lép. France*, iii. 165, 53, pl. 22, f. 18. *Guér. Icon. Règne Anim. Ins.* pl. 84 bis, f. 9, larva

Procris infausta, *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. 26, 1.

Atychia infausta, *Ochs. Schmett. Eur.* ii. 17, 4. *Hübner. Verz. Schmett.* 120, 1296. *Chenu, Enc. d'Hist. Nat. Pap.* 243, f. 419.

South France. Boppard, on the Rhine.

α. Europe. From M. Becker's collection.

Div. 3. *Alæ anticæ maculatæ.*

18. *PROCRIS CONTRARIA.*

Nigra; antennæ nigro-virides, validæ, late pectinatæ; thorax luteo-bimaculatus; abdomen luteum; alæ anticæ luteo quinque-maculatæ; posticæ rufæ nigro marginatæ.

Black. Antennæ dark green, stout, deeply pectinated. Thorax with a luteous spot on each side in front. Abdomen luteous. Fore wings with five luteous spots, one at the base, two close together before the middle of the disk, and two smaller and more apart at half the distance between the two preceding and the tip of the wing. Hind wings bright red, with a very broad black border which is much indented on the hind margin. Fore coxæ clothed with luteous hairs. Length of the body 4 lines; of the wings 14 lines.

It agrees with the *Zygæna* in colour, and differs much from all the other species of *Procris*.

α. Port Natal. From M. Gueinzus' collection.

19. PROCRIS STIPATA.

Aureo-viridis; antennæ cyaneo-virides; alæ nigro-fuscae, albo ciliatæ; anticæ basi aureo-virides, albo quadrimaculatæ; posticæ albo bimaculatæ.

Golden-green. Proboscis and palpi piceous. Antennæ bluish-green, more slender than in most species of the genus. Wings blackish-brown, with a white fringe which is partly gray on each wing. Fore wings golden-green at the base, and with four white spots, two in the middle of the disk and two in front. Hind wings with two irregular white marks, one near the base, the other in the disk. Length of the body 3 lines; of the wings 10 lines.

a. North India. Presented by E. Doubleday, Esq.

Genus 3. POLLANISUS.

Mas. Corpus gracile, sæpissime metallicum. Proboscis longa. Palpi breves; articulo 3o minimo. Antennæ setaceæ, corpore vix breviores, latissime pectinatæ, ramulis clavatis apice pilosis. Alæ latæ, sat longæ; anticæ sæpissime metallicæ. Pedes graciles; tibiæ posticæ calcaribus sat longis.

Male. Body slender, generally metallic. Proboscis long. Palpi short; third joint very small. Antennæ setaceous, nearly as long as the body, very deeply pectinated; branches clavate, hairy towards the tips. Wings broad, moderately long; fore wings generally metallic. Abdomen not extending beyond the hind border of the hind wings. Legs slender; spurs of the hind tibiæ moderately long.

1. POLLANISUS VIRIDI-PULVERULENTUS.

Aureo-viridis; proboscis et palpi ferruginea; alæ anticæ cupreo ciliatæ subtus fuscae, posticæ fuscae subtus ex parte virides; abdomen sæpissime cupreum; pedes plerumque fusci.

Procris? viridi-pulverulenta, *Guérin, Mag. Zool.* 1839; *Ins.* pl. 11, f. 4.

Golden-green. Proboscis and palpi ferruginous. Fore wings with a cupreous fringe, brown beneath. Hind wings brown, partly

green beneath. Abdomen generally cupreous. Legs mostly brown. Length of the body 3—3½ lines; of the wings 11—14 lines.

Var. β . Fore wings slightly green beneath.

a, b. Van Dieman's Land. Presented by R. Butler, Esq.

c. Van Dieman's Land. From Mr. A. J. Smith's collection.

d—f. Sidney. From Mr. Lambert's collection.

g, h. Van Dieman's Land. Presented by the Rev. Augustus Beaufort.

2. POLLANISUS SEQUENS.

Viridis; proboscis et palpi ferruginea; alæ anticæ subtus fuscae, posticæ fuscae nonnunquam subtus viridescentes; pedes plerumque fusi.

Green. Proboscis and palpi ferruginous. Fore wings narrower than those of *P. viridi-pulverulenta*, brown beneath. Hind wings brown, sometimes tinged with green beneath. Legs mostly brown. Length of the body 2½ lines; of the wings 8 lines.

a—c. Van Dieman's Land. Presented by E. Doubleday, Esq.

3. POLLANISUS CUPREUS.

Læte cupreus; proboscis et palpi picea; antennæ corpore longiores; alæ anticæ apices versus subpurpureæ, subtus et posticæ cupreo-fuscae.

Bright cupreous. Proboscis and palpi piceous. Antennæ longer than the body. Fore wings purplish towards the tips, cupreous brown beneath. Hind wings cupreous brown. Length of the body 2½—3 lines; of the wings 9—10 lines.

a. West Australia. From Mr. G. Clifton's collection.

b. Swan River. Presented by Sir J. Richardson.

Genus 4. HETEROGYNIS.

Larvæ tenuæ pubescentes, contractæ, onisciformes, subdiales. Pupæ folliculo rectiformi inclusæ. Metamorphoses fœminæ subnullæ; illius imago a larva nisi pelle nova discrepans, in folliculo copulans ovaque parens. Mas habitu ad *Procrides* accedens: antennæ sublineares, pectinatæ, apice cuspidatæ. Lingua brevior.

Palpi brevissimi, villosi. Corpus gracilius. Alæ latiores, diaphanofuliginosæ ut apud *Psychides*. Volatus diurnus.

Heterogynis, *Boisd. Ind. Méth. Lép. Eur.* 55; *Ramb. Ann. Soc. Ent. Fr.* v. 584; *Faune Andalus.*; *Chenu*.

Tinea, p., *Hüb.*

Heterogynides et Heterogynis, *Herr.-Schæff. Samml. Eur. Schm.* *Suppl.* ii. 23, pl. 16, f. 19—21; *Bombycid.* pl. 19.

1. HETEROGYNIS PENELLA.

Antennæ alarum anticarum dimidium superantes, dentibus subverticalibus, apicem versus parum decrescentibus. Long. alar. 8—9 lin.

Heterogynis Penella, *Ramb. Faune Andalus. Duponch. Suppl. Hist. Nat. Lép. France*, pl. 56, f. 14. *Herr.-Schæff. Samml. Eur. Schm.* *Suppl.* ii. 24, 2, f. 98.

Tinea Penella, *Hüb. Tin.* f. 447.

Epichnopteryx Penella, *Hüb. Verz. Schm.* 399, 3861.

Heterogynis Padella, *Chenu, Enc. d'Hist. Nat. Pap.* 244, f. 420—423.

South France.

2. HETEROGYNIS PARADOXA.

* *Antennæ alarum anticarum dimidium non attingentes, dentibus obliquis apicem versus decrescentibus.* Long. alar. 10—11 lin.

Heterogynis paradoxa, *Ramb. Ann. Soc. Ent. Fr.* v. pl. 17, A. f. 6—8. *Faune Andalus. Herr.-Schæff. Samml. Eur. Schm.* *Suppl.* ii. 24, 1, f. 99.

Sierra Nevada.

3. HETEROGYNIS AFFINIS.

Heterogynis affinis, *Ramb. Faune Andalus.*

Heterogynis paradoxa, var.?

Andalusia.

Var. Heterogynis hispana, *Ramb. Faune Andalus.*

Catalonia.

Genus 5. SYNTOMIS.

Larvæ cylindricæ vel cylindrico-ovatæ, pilosæ. Pupæ folliculo molli involutæ. Palpi breves, subcylindrici, obtusi, ultra frontem non ascendentes. Antennæ lineares, graciles, subfusiformes, dimidio corporis longiores, nunquam pectinatæ. Lingua convoluta. Calcareas tibiæ posteriorum breves. Alæ elongatæ, maculatæ. Pedes mediocres, obsolete calcarati.

Syntomis, *Ochs. Schmett. von Eur.* ii. 103; *Hoffm.*; *Latr.*; *Boisd.*; *Croch.*; *Chenu*; *Herr.-Schæff.*

Sphinx, *Linn.*; *Scop.*; *Esp.*; *Hüb.*; *Borkh.*

Zygæna, *Fabr. Ent. Syst.*

Amata, *Fabr. Syst. Gloss.*

Chrysaorea Excelsæ Syntomes, et Cœnochromiæ, et Eutomes, *Hüb.*

Verz. Schmett. 119—121.

Syntomeida, *Harris.*

Antennæ bipectinated, tapering at each end. Lingua moderate, spirally rolled. Palpi short, not extending beyond the clypeus, slightly curved and hairy at the base, covered with short close scales; terminal joint somewhat acuminate. Wings elongated. Hind wings small, with the discal areolet closed behind by an acute-angled vein, the fore branch of which crosses the subcostal vein and ends near the tip of the wing. Body cylindrical, rounded and not tufted behind, and with a rounded tubercle at each end of the first abdominal segment. Spurs of the hind tibiæ four, small, approximate.

Synopsis of the Species in the British Museum:—

- | | |
|--|------------------------|
| a. Antennæ not serrated or pectinated. | |
| b. Abdomen with one band (not reckoning the pale hairs at the base.) | |
| c. Wings green. | 1. <i>Phegea.</i> |
| cc. Wings cupreous brown. | |
| d. Hind wings with two spots. | 3. <i>Schænherri.</i> |
| dd. Hind wings with one spot. | |
| e. Fore wings with a single spot near the base. | 24. <i>Atereus.</i> |
| ee. Fore wings with no spot near the base. | |
| f. Abdomen with a yellow band. | 23. <i>Meon.</i> |
| ff. Abdomen with a white band. | 27. <i>albimacula.</i> |
| bb. Abdomen with several spots on each side, or bands. | |
| c. Wings green or blue with limpid spots. | |
| d. Thorax not spotted. | |
| e. Abdomen with the tip not tawny. | |

- | | |
|--|-------------------|
| f. Abdomen with no spot or band at the base. | 28. simplex. |
| ff. Abdomen with a yellow spot at the base. | 29. nostalis. |
| fff. Abdomen with a red spot at the base. | 9. Cerbera. |
| ffff. Abdomen with a white spot. | 25. Minceus. |
| fffff. Abdomen with a reddish band at the base. | 13. Creusa. |
| ee. Abdomen with a tawny tip. | 30. terminalis. |
| dd. Thorax spotted. | 31. marginalis. |
| oc. Wings æneous brown. | |
| h. Abdomen with many bands. | |
| i. Wings with limpid spots. | |
| j. Spots very small. | 8. Latreilli. |
| jj. Spots very large. | |
| k. Abdomen with three bands. | 32. divisa. |
| kk. Abdomen with six bands. | 16. fenestrata. |
| gg. Wings with luteous spots. | 15. annulata. |
| bbb. Abdomen with a yellow stripe along each side,
or wholly yellow except a band near the tip. | |
| c. Wings with limpid spots. | 7. Ochsenheimeri. |
| cc. Wings with luteous spots. | 19. Hübneri. |
| ccc. Wings yellowish hyaline, with brown borders. | 33. fervida. |
| aa. Antennæ serrated. | |
| b. Thorax with two dorsal stripes. | 37. Melas. |
| bb. Thorax with no dorsal stripes. | 22. diaphana. |
| aaa. Antennæ minutely pectinated. | |
| b. Body green; abdomen red at the base. | 36. pectoralis. |
| bb. Body brown, with yellow hairs. | 35. fulvescens. |
| bbb. Thorax green; abdomen reddish, with
three rows of spots. | 38. multigutta. |
| aaaa. Antennæ moderately pectinated. | 34. subcordata. |

1. SYNTOMIS PHEGEA.

Alæ omnes nigro-cyanæ micantes; anticæ maculis sex, posticis duabus diaphanis; abdomen cingulo flavo; antennæ apice albæ.

Syntomis Phegea, Ochs. Schmett. von Eur. ii. 105, 1. God. Lépid. de France, Crép. i. 154, pl. 22, f. 14. Hübn. Verz. Schmett. 121, 1318. Boisd. Mon. Zyg. 108, pl. 6, f. 8. Guér. Icon. Rég. Anim. pl. 84 bis, f. 7. Westw. ed. Drury, i. 48, pl. 25, f. 2. Croch. ed. Règne Anim. Atlas, Ins. pl. 148, f. 5. Chenu, Enc. d'Hist. Nat. Pap. 246, f. 425. Herr.-Schæff. Samml. Eur. Schmett. Suppl. ii. 50—1. Everm. Faune Lép. Volgo-Ural, 99, 1.

Sphinx Phegea, Linn. *Syst. Nat.* ii. 805, 35; *Mus. Lud. Utr.* 436, 24. *Scop. Ent. Carn.* 190, 430. *Rossi, Faun. Etrusc.* ii. 166, 1068. *Drury, Ill. Nat. Hist.* i. pl. 25, f. 2. *Frisch. Ins.* vi. 33, pl. 15. *Hübner, Sphing.* pl. 20, f. 99, 100. *Larv. Lep.* ii. *Sphing.* i. f. a, b. *Esp. Schmett.* ii, 144, pl. 17, f. 1, 2. *Borkh. Eur. Schmett.* ii. 3, 116, 154, 1. *Panz, Faun. Ins. Germ.* v. pl. 20.

Sphinx, &c., *Engr. Pap. d'Eur.* iii. 67, pl. 102, f. 147, c, d.
Zygæna Phegea, *Fabr. Sp. Ins.* ii. 158, 4; *Mant. Ins.* ii. 101, 5.
Zygæna Quercus, *Fab. Ent. Syst.* iii. 1, 388, 6. *Schr. Faun. Boie.* ii. 1, 236, 1403. *Pet. Inst. Ent.* ii. 506, pl. 8. f. 3.
Sphinx Zygæna Phegea, *Gmel. ed. Syst. Nat.* i. 5, 2391, 35.
Sphinx ligata, *Manip. Insect. Taurin.* 193.

Var. 1. *Alæ omnes atro-cæruleæ; anticæ maculis tribus rotundatis striolaque transversa versus marginem interiorem; posticæ macula unica.*

Sphinx Phegea, *Hübner. Sphing.* pl. 5, f. 80, *Esp. Schmett.* ii. 48, pl. 47, *Cont.* 22, f. 3.

Var. 2. *Alæ omnes concolores violaceæ, singulæ macula utrinque alba.*

Sphinx Clelia, *Esp. Schmett.* ii. pl. 34, *Cont.* 9, f. 1. *Borkh. Rhein. Magaz.* i. 626, 2. *Illig. N. Ausg. des Wien. Verz.* i. 46.
Sphinx, &c., (var.) *Engr. Pap. d'Eur.* i. 67, pl. 102, f. 147, e, f.

Var. 3. *Alæ omnes concolores atro-cæruleæ, immaculatæ.*

Sphinx Iphimedeia, *Esp. Schmett.* ii. 49, pl. 47, *Cont.* 22.

Var. 4. *Alæ omnes fenestratæ, nigro marginatæ, venis atris.*

Belgium. France. Piedmont. Austria. Hungary. Russia.
 Dalmatia. Italy. Sicily. Greece. Persia.

a—e. Nice. From Dr. Leach's collection.

f—j. Europe. From M. Becker's collection.

k, l. Pyrenees. Presented by M. Pierret.

m. ———?

2. SYNTOMIS MESTRALII.

Affinis S. Phegeæ, sed major; alæ nigro-cyanæ nitidæ, anticæ maculis sex pallide flavidis, posticæ macula unica; abdomen cingulo non interrupto flavo.

Syntomis Mestrali, Bugnion, Ann. Soc. Ent. Fr. vi. 432, pl. 16, f. 1.

Syria.

3. SYNTOMIS SCHÖENERRI.

Alæ omnes nigre nitidæ; anticæ maculis sex fenestratis albis; posticæ duabus; prothorax abdominisque cingulum flavo.

Syntomis Schœnerrhi, Boisd. Mon. Zyg. 112, pl. 7, f. 1.

a. Nepaul. Presented by E. Doubleday, Esq.

b, c. North India. From M. Stevens' collection.

d, e. Ceylon. Presented by R. Templeton, Esq.

f. North Bengal. Presented by W. W. Saunders, Esq.

g, h. Nepaul.

i. ——— ?

4. SYNTOMIS BICINCTA.

Alæ nigre; anticæ maculis fenestratis albis quinque, posticæ duabus; abdomen cingulis duobus flavis. Long. alar. 12 lin.

Syntomis bicincta, Kollar, Kaschmir von Von Hügel, iv. 460, 2, pl. 19, f. 8.

S. Schœnherri Var. ?

Himalaya.

5. SYNTOMIS CYSSEA.

Alæ omnes atræ, anticæ maculis sex, posticæ duabus albis, diaphanis; prothorax abdominisque cingulum luteo-aurantiaco.

Sphinx cysseus, Cram. Pap. Exot. iv. 124, pl. 355, f. B.

Syntomis cyssea, Boisd. Mon. Zyg. 1143, pl. 7, f. 2.

Zygæna collaris, Fabr. Ent. Syst. iii. 1, 388, 7.

Syntomis collaris, Hübn. Verz. Schmett. 121, 1319.

Coromandel. Bengal.

6. SYNTOMIS GODARTII.

Alæ omnes diaphanæ, venis margineque nigris ; prothorax et abdominis cingulum flava.

Syntomis Godartii, *Boisd. Mon. Zyg.* 115, pl. 7, f. 3.

Coromandel. Bengal. Molucca Isles.

7. SYNTOMIS OCHSENHEIMERI.

Alæ omnes diaphanæ, venis margineque nigris ; antica macula nigra triangulari ; prothorax, pectus et abdomen aurantiaca, segmentis ultimis nigris.

Syntomis Ochsenheimeri, *Boisd. Mon. Zyg.* 116, pl. 7, f. 4.

Bengal. Java.

a. Congo. Presented by Sir J. Richardson.

8. SYNTOMIS LATREILLII.

Alæ anticæ nigrae, cyaneo-micantes, maculis quinque fenestratis ; posticæ nigro-cyaneæ, macula fenestrata ; thorax abdominisque segmenta flava.

Syntomis Latreillii, *Boisd. Mon. Zyg.* 117, pl. 7, f. 5. *Chenu, Enc. d'Hist. Nat. Pap.* 246, f. 426.

Java. Amboina. China.

a. East Indies. From Mr. Warwick's collection.

b. East Indies.

9. SYNTOMIS CERBERA.

Alæ omnes nigro-cæruleæ ; anticæ sex, posticæ duabus maculis fenestratis ; abdomen cingulis sanguineis.

Syntomis Cerbera, *Boisd. Mon. Zyg.* 118, pl. 7, f. 6. *Westw. ed. Drury*, 1, pl. 26, f. 2.

Sphinx Cerbera, *Linn. Syst. Nat.* i. 2, 806, 38 ; *Mus. Lud. Utr.* 363, 23. *Sulz. Hist. Ins.* i. pl. 26, f. 2. *Drury, Ill. Nat. Hist.* ii. 53, pl. 25, f. 2. *Cram. Pap. Exot.* pl. 83, f. F. *Hübner, Sphing.* pl. 23, f. 110.

Zygæna Cerbera, *Fabr. Sp. Ins.* ii. 160, 12; *Mant. Ins.* ii. 103, 14; *Ent. Syst.* iii. 1, 391, 16. *Sulz. Abgek. Gesch.* pl. 23, f. 110.

Sphinx Zygæna Cerbera, *Gmel. ed. Syst. Nat.* i. 5, 2393, 38.

Cænochromia Cerbera, *Hübner. Verz. Schmett.* 121, 1317.

Senegal. Guinea. Cape. Bengal.

Var. ? *Nigro-cyanea*, *capite antico antennisque apice albis*; *pectus ochraceo bimaculatum*; *abdomen macula basali transversa guttisque lateralibus rufis*; *alæ anticæ maculis quinque, posticæ duabus limpidis.*

Blackish blue. Head white in front. Proboscis, palpi and antennæ black. Tips of the antennæ white above. Pectus with a large orange spot on each side. Fore wings with five limpid spots, one near the base, the rest in two oblique lines, two on the first line a little before the middle, and two on the second very near together and beyond the middle. Hind wings with two limpid spots, the larger one near the base, and the smaller one near the middle of the disk and towards the hind border. Abdomen with a large transverse red spot above at the base, and with a row of red dots along each side beneath. Length of the body 5 lines; of the wings 16 lines.

a, b. South Africa. From Mr. Argent's collection.

c, d. Port Natal. From M. Gueinzus' collection.

e, f. Sierra Leone. Presented by the Rev. D. F. Morgan.

g—i. Port Natal. From Dr. Krauss' collection.

j—l. Cape. Presented by Dr. A. Smith.

m. Zoolu Country. From Mr. Wardrop and Ewart's collection.

n. South Africa. Presented by G. F. Angas, Esq.

o. Cape. From M. Drège's collection.

p. Cape. From M. Becker's collection.

q—s. ——— ?

10. SYNTOMIS KHULWEINII.

Alæ omnes nigro-virides; *anticæ maculis sex, posticæ maculis duabus fenestratis*; *frons, femora antica, tarsique basi insuper alba*; *pectus et abdomen sanguinea.* Long. alar. 16 lin.

Syntomis Khulweinii, *Lefebvre, Mag. Zool. Class.* ix. pl. 23, 1831.

Sphinx Minceus? *Cram. Pap. Exot.* iv. 109, pl. 347, f. A.

Eutomis Minceus? *Hübner. Verz. Schmett.* 122, 1322.

Cape.

11. SYNTOMIS LATERALIS.

Syntomis lateralis, *Boisd. Spec. Gén. Lép.* i. pl. 16, f. 5.

12. SYNTOMIS PASSALIS.

Alæ nigrae, punctis fenestratis; anticæ sex, posticæ unico; abdominis segmenta alternatim cyanea et sanguinea.

Zygæna Passalis, *Fabr. Sp. Ins.* ii. 159, 11; *Mant. Ins.* ii. 102, 13; *Ent. Syst.* iii. 1, 391, 15.

Sphinx Zygæna Passalis, *Gmel. ed. Syst. Nat.* i. 5, 2393, 114.

Syntomis Passalis, *Boisd. Mon. Zyg.* 120.

East Indies.

13. SYNTOMIS CREÛSA.

Alæ omnes nigro-cyaneæ; anticæ maculis sex fenestratis; posticæ macula unica; humeri et abdominis segmenta rubra.

Syntomis CreÛsa, *Boisd. Mon. Zyg.* 121, pl. 7, f. 7.

Sphinx CreÛsa, *Linn. Syst. Nat.* ii. 806, 39; *Mus. Lud. Ulr.* 365.

Clerck, Icon. pl. 46, f. 5. *Cram. Pap. Exot.* pl. 243, f. F.

Sphinx Zygæna CreÛsa, *Gmel. ed. Syst. Nat.* i. 5, 2394, 39.

Cænochromia CreÛsa, *Hübner. Verz. Schmett.* 121, 1316.

Coromandel. Bengal.

a. Ceylon. Presented by R. Templeton, Esq.

b. Ceylon. From the Rev. J. Wenham's collection.

14. SYNTOMIS THELEBUS.

Alæ nigrae; anticæ maculis quinque, posticæ brevissimæ disco hyalino; abdomen flavum, nigro annulatum.

Syntomis Thelebus, *Boisd. Mon. Zyg.* 122.

Zygæna Thelebus, *Fabr. Mant. Ins.* ii. 103, 17; *Ent. Syst.* iii. 1, 391, 19.

Sphinx Zygæna Thelebus, *Gmel. ed. Syst. Nat.* i. 5, 2393, 117.

China.

15. SYNTOMIS ANNULATA.

Alæ anticæ nigrae, micantes, maculis quinque luteis, subfenestratis ; posticæ nigrae, maculis duabus luteis, basali majore ; prothorax et abdominis segmenta alternatim lutea.

Syntomis annulata, *Boisd. Mon. Zyg.* 122, pl. 7, f. 8 ; pl. 8, f. 2.
Zygæna annulata, *Fabr. Sp. Ins.* ii. 159, 7 ; *Mant. Ins.* ii. 102, 9 ;
Ent. Syst. iii. 1, 389, 11.

Sphinx Zygæna annulata, *Gmel. ed. Syst. Nat.* i. 5, 2392, 111.

New Holland. Isle Timor. New Guinea.

a—c. New Holland. Presented by the late Earl of Derby.

d—f. New Holland. Presented by E. Doubleday, Esq.

g. New Holland. From Mr. Hunter's collection.

h. Sydney. From Mr. Lambert's collection.

i, j. New Holland. From Mr. Dring's collection.

k. New Holland. From the Voyage of H.M.S. Rattlesnake.

l—o. New Holland.

16. SYNTOMIS FENESTRATA.

Alæ omnes nigrae ; anticæ venis aurantiacis maculisque quinque fenestratis ; posticæ maculis binis ; thorax et abdomen aurantiaca, hoc cingulis atris.

Syntomis fenestrata, *Boisd. Mon. Zyg.* 124, pl. 8, f. 1.

Sphinx fenestrata, *Drury, Ill. Nat. Hist.* ii. 50, pl. 28, f. 5.

Papilio Thelebus? *Cram. Pap.* xiii. pl. 151, f. D.

Zygæna fenestrata, *Fabr. Sp. Ins.* ii. 160, 15 ; *Mant. Ins.* ii. 103, 19 ;
Ent. Syst. iii. 1, 392, 21.

Sphinx Zygæna fenestrata, *Gmel. ed. Syst. Nat.* i. 5, 2394, 119.

Philippine Isles. China.

a—d. Hong Kong. Presented by J. C. Bowering, Esq.

e. Hong Kong. From Mr. Harrington's collection.

f—i. China.

17. SYNTOMIS POLYDAMON.

Alæ omnes nigrae ; anticæ maculis novem luteæ, subdiaphanae ; posticæ maculis majoribus luteis ; abdomen virescens, elongatum.

Syntomis Polydamon, *Boisd. Mon. Zyg.* 124, pl. 8, f. 3.

Sphinx Polydamon, *Cram. Pap. Exot.* iii. 75, pl. 237, f. B.

South Africa.

18. SYNTOMIS SPERBIUS.

Alæ atræ; anticæ maculis quinque, posticæ unica fenestratis; abdomen atrum, fasciis duabus flavis; frons alba.

Syntomis Sperbius, *Boisd. Mon. Zyg.* 126.

Zygæna Sperbius, *Fabr. Mant. Ins.* ii. 103, 18; *Ent. Syst.* iii. 392, 20.

Sphinx Zygæna Sperbius, *Gmel. ed. Syst. Nat.* i. 5, 2394, 118.

Java. China.

19. SYNTOMIS HÜBNERI.

Alæ omnes nigre; anticæ maculis quinque fenestratis, posticæ duabus; prothorax, humeri et abdominis segmenta luteo-aurantiaca.

Syntomis Hübneri, *Boisd. Mon. Zyg.* 127, pl. 8, f. 4.

Java. Amboina.

a, b. North India. From Mr. Stevens' collection.

c, d. North India. From Mr. L. James' collection.

e. East Indies. From Archdeacon Clerk's collection.

f. Himalayan Mountains. From Mr. Leadbeater's collection.

g. ———?

20. SYNTOMIS MYODES.

Nigro-fusca; caput macula antica lineisque duabus posticis flavis; thorax vitta dorsali maculisque lateralibus flavis, alæ anticæ maculis tribus magnis hyalinis discalibus unaque basali flava; posticæ flavæ parvæ, puncto discali margineque nigris; abdomen maculis lateralibus ventreque flavis; pedes pallide flavi.

Syntomis Myodes, *Boisd. Guér. Icon. Règne Anim.* pl. 84 bis, f. 6, *Texte*, 500; *Faune Ent. Mad. Bourb. et Maur. Lép.* 80, 1, pl. 11, f. 5.

Tamatava, Madagascar.

21. SYNTOMIS MINUTA.

Alæ anticæ fuscæ, maculis tribus hyalinis duabusque luteis; posticæ luteæ, margine fusco; abdomen luteum, punctis dorsalibus nigris.

Syntomis minuta, *Boisd. Faune Ent. Mad. Bourb. et Maur. Lép.* 80, 2, pl. 11, f. 6.

Tamatava, Madagascar.

22. SYNTOMIS DIAPHANA.

Alæ diaphanæ, marginibus, macula in anticis costali venisque nigris; fronte, maculis humeralibus, metathoracis cingulisque medio interruptis, flavis. Long. alar. 20 (mas.)—25½ (fœm.) lin.

Syntomis diaphana, *Kollar, Kaschmir von Von Hügel*, iv. 460, pl. 19, f. 7.

Himalaya, Massuri.

Var.? *Nigro-viridis, flavo varia; antennæ nigræ, serratæ, apice albæ; alæ hyalinæ subluridæ purpureo-fusco marginatæ, anticæ purpureo-fusco fasciatæ.*

Blackish green. Head pale yellow; vertex black. Proboscis tawny. Antennæ black, serrated along the whole length, white above towards the tips. Thorax with an interrupted yellow band in front, and with a large subtriangular yellow mark on each side; scutellum and pectus mostly yellow. Wings hyaline, with a slight lurid tinge; borders, band on the tip of the discal areolet, and an opposite mark on the hind border purplish brown. Abdominal segments with more or less interrupted yellow bands. Legs blackish brown. Length of the body 6 lines; of the wings 14 lines.

Var. β . Band of the discal areolet extending to the hind border of the wing.

α —c. North India. From Mr. Stevens' collection.

23. SYNTOMIS IMAON.

Mas. *Fusca, cylindrica, sublinearis*; caput antice luteum; antennæ graciles, subserratae; thorax fascia antica subinterrupta lutea; alæ cupreo-fuscae; anticæ amplæ maculis quinque magnis subdivisis limpidis; posticæ plus dimidio basali limpidæ; abdomen luteo bifasciatum.

Var. *Purpureo-fusca*, proboscide, palpis antennisque nigris; prothorax fascia interrupta flava; pectoris latera flavo oblique bifasciata; abdomen flavo bifasciatum; alæ anticæ fasciis duabus latis limpidis, posticæ macula magna basali limpida.

Syntomis? Imaon, *Boisd. Mon. Zyg.* 114.

Sphinx adscita Imaon, *Cram. Pap. Exot.* iii. 94, pl. 248, f. E.

Syntomis Imaon, *Hübner. Verz. Schmett.* 122, 1321.

Surinam?

Male. Dark brown, cylindrical, nearly linear. Head luteous in front. Antennæ slender, serrated beneath. Thorax with a slightly interrupted luteous band in front. Pectus with luteous hairs. Wings brown, with a cupreous tinge. Fore wings rather long and broad, with five large limpid slightly divided spots, three near the base, two towards the tips; discal fold not apparent in the discal areolet. Hind wings limpid for more than half the length from the base. Abdomen with a luteous band at the base and another beyond the middle. Legs rather slender; spurs of the hind tibiæ small. Length of the body 6 lines; of the wings 14 lines.

Var.? Purplish brown. Proboscis, palpi and antennæ black. Prothorax with an interrupted yellow band. Pectus with two large oblique yellow bands on each side. Wings purplish brown, slightly cupreous. Fore wings with two broad irregular limpid bands which are interrupted by the coloured borders of the veins. Hind wings with a large limpid spot at the base. Abdomen with a yellow band at the base, and another beyond the middle.

a, b. Ceylon. Presented by R. Templeton, Esq.

c. Silhet. From Mr. Stainforth's collection.

d. Hong Kong. From Mr. Harrington's collection.

24. SYNTOMIS ATEREUS?

Nigro-fusca, purpurascens; antennæ apice albæ; abdomen macula basali fasciæque flavis; alæ anticæ maculis sex limpidis, posticæ basi vel omnino limpidae.

Sphinx adscita Atereus, Cram. Pap. Exot. iv. 240, pl. 400, f. A.
Syntomis Atereus, Hübn. Verz. Schmett. 122, 1320.

Coromandel.

Var. ? Blackish brown, with a slight purplish tinge. Antennæ white above towards the tips. Fore wings with six limpid spots, one near the base, two a little before the middle, and three nearer the tips, two of the latter are merely divided by a vein. Hind wings limpid towards the base where the hind border is yellow. Abdomen with a large yellow transverse dorsal spot at the base and with a yellow band a little beyond the middle. Length of the body 4—5 lines; of the wings 12—14 lines.

Var. β. Head yellowish white in front.

Var. γ. Tip of the abdomen with yellow hairs.

Var. δ. Hind wings limpid; borders irregularly brown. Abdominal segments with yellow bands along the hind borders.

a. Madras. Presented by Walter Elliott, Esq.

b. East Indies. From Archdeacon Clerk's collection.

c—e. China. Presented by G. T. Laye, Esq.

25. SYNTOMIS MINCEUS.

Viridis; alæ anticæ maculis sex, posticæ duabus limpidis; abdomen macula basali fasciisque quatuor albis.

Sphinx adscita Minceus, Cram. Pap. Exot. iv. 109, pl. 347, f. A.

Eutomis Mincea, Hübn. Verz. Schmett. 122, 1322.

a—c. Cape. From Mr. Drège's collection.

26. SYNTOMIS ALBIMACULA.

Mas. Viridis, proboscide, palpis pedibusque piceis; caput antice albo guttatum; antennæ nigrae apice flavescens; pectus albo bimaculatum; abdomen albo bifasciatum; alæ anticæ plus dimidio basali maculisque duabus limpidis; posticæ quadrario basali postico limpido.

Male. Dark green. Proboscis, palpi and legs piceous. Antennæ black with yellowish tips. Head with a white dot in front. Pectus with a very large white spot on each side. Fore wings limpid with the exception of the borders from the base to the end of the discal areolet, a little beyond which are two limpid spots, the hind one larger than the fore one. Hind wings limpid along the hind border for half the length and more than half the breadth. Abdomen with a white band at the base and another a little beyond the middle; under side with two white bands before the middle. Length of the body 5 lines; of the wings 14 lines.

a. Sierra Leone. Presented by the Rev. D. F. Morgan.

27. SYNTOMIS SIMPLEX.

Nigro-cyanea, proboscide palpis antennisque nigris; antennæ apice albæ; pectoris abdominisque latera aureo maculata; alæ anticae maculis sex limpidis, posticæ macula discali limpida.

Blackish blue. Proboscis, palpi and antennæ black. Tips of the antennæ white above. Pectus with a large gilded spot on each side. Fore wings with six limpid spots, one near the base, the rest in two oblique lines, two on the first line before the middle, three on the second near the tip in which the middle spot is occasionally obsolete. Hind wings with a limpid spot in the disk. Abdomen with two gilded spots above at the base, and with a row of gilded spots along each side. Length of the body $3\frac{1}{2}$ —5 lines; of the wings 12—14 lines.

a. Port Natal. From Mr. Stevens' collection.

b—d. ———? Presented by E. Doubleday, Esq.

e. Congo. Presented by Sir J. Richardson.

28. SYNTOMIS NOSTALIS.

Nigro-cyanea, proboscide palpis antennisque nigris; antennæ apice albæ; abdomen maculis lateralibus auratis; alæ cyaneo-purpureæ, albo guttatæ.

Syntomis Nostalis, MSS.

Dark blue. Proboscis, palpi and antennæ black, the latter with white tips. Wings bluish purple. Fore wings with five small limpid spots, one near the base, two in an oblique line before the middle, and two in a hardly oblique line beyond the middle. Hind wings

with spots in a small oblique line beyond the middle. Abdomen with a gilded spot at the base and with three gilded spots on each side. Length of the body 5—5½ lines; of the wings 13—14 lines.

Var. β. Spots on the fore wings very small, two of them very indistinct.

a. Port Natal. From Mr. Stevens' collection.

b. Port Natal. From M. Becker's collection.

29. SYNTOMIS TERMINALIS.

Nigra aut nigro-viridis; abdomen apice fulvum; alæ limpidæ nigro marginatæ, anticæ nigro unifasciatæ.

Described from two injured specimens. Black (or blackish green?). Wings limpid; tips, borders, and most of the borders of the veins black; a black band dilated hindward across the middle of each fore wing. Hind wings wholly limpid in the disk and along the basal part of the hind border. Tip of the abdomen tawny. Length of the body 4½—5 lines; of the wings 15—16 lines.

a. Congo. Presented by Sir J. Richardson.

b. ———? Presented by E. Doubleday, Esq.

30. SYNTOMIS MARGINALIS.

Nigro-viridis, luteo flavoque varia; alæ anticæ e maculis limpidis bifasciatæ, posticæ guttis quatuor limpidis, gutta strigique flavis.

Dark green. Head yellow in front. Prothorax with a yellow spot on each side. Mesothorax with two larger luteous spots, one at the base of each fore wing. Fore wings with a limpid dot near the base and another near the tip, and with five limpid spots forming two upright bands in the disk; first band composed of two spots far apart, second of three spots, the hinder two only divided by a hardly clouded vein. Hind wings with a yellow streak in front, and with a yellow dot at the hinder base, and with four limpid dots, one near the yellow dot, one near the yellow streak, and two near the hind border towards the tip, one of them very small. Abdomen with six short luteous bands on each side; under side with a short broad luteous stripe on the disk. Coxæ luteous on one side; femora and tibiæ with slight luteous streaks. Length of the body 8 lines; of the wings 21 lines.

a. Ashanti. From the collection of the Wesleyan Missionary Society.

31. SYNTOMIS DIVISA.

Nigro-viridis, capitis vittis duabus facieque albis, proboscide palpis antennisque nigris; thorax testaceo sexmaculatus; abdomen testaceo quinquefasciatum; alæ limpidæ fusco marginatæ, venis fusco limbatis; tarsi basi albi.

Blackish green. Head white in front, and with a white stripe on each side. Proboscis, palpi and antennæ black. Thorax with three testaceous spots on each side. Pectus with a large testaceous spot on each side. Wings limpid, their margins and most of the veins bordered with brown. Abdomen with five testaceous bands; apical third part without bands. Fore coxæ white on one side; tarsi white at the base. Length of the body 7—8 lines; of the wings 18—22 lines.

a, b. Silhet. Presented by E. Doubleday, Esq.

c. Silhet. From Mr. Argent's collection.

32. SYNTOMIS FERVIDA.

Lutea, proboscide palpis antennisque nigris; caput nigrum, luteo varium; thorax nigro trivittatus; abdomen viridi fasciatum; alæ hyalinæ, subluteæ, nigro marginatæ et subfasciatæ; pedes nigricantes, tarsi basi albis.

Bright luteous. Head black, luteous in front, and with a luteous interrupted band behind. Proboscis, palpi and antennæ black. Prothorax with one black stripe. Mesothorax with three black stripes. Wings hyaline, slightly luteous; veins mostly luteous, a luteous streak along part of the hind border from the base. Fore wings with a short black streak at the base, with a black mark across the tip of the discal areolet, with a black spot on the tips of the third and fourth inferior veins, and with black tips; fore border from the end of the discal areolet to the tip, and hind border black. Hind wings with black borders, and with an oblique black mark extending from the hind border to the disk. Abdomen with a dark green band on the fore border of each segment; tip green. Legs blackish; tarsi white at the base. Length of the body 6 lines; of the wings 16 lines.

a. East Indies. From Archdeacon Clerk's collection.

33. SYNTOMIS SUBCORDATA.

Nigro-fusca; caput luteum, vertice nigro; proboscis lutea; palpi nigri; antennæ pectinatæ; thorax luteo varius; abdomen luteo subfasciatum; alæ anticæ maculis tribus luteo-hyalinis, posticæ macula una opaca lutea; pedes graciles.

Blackish brown. Head luteous; vertex black. Proboscis luteous. Palpi black, short; third joint small, acuminate. Antennæ moderately pectinated to the tips. Prothorax and scutellum generally more or less luteous. Wings moderately broad. Fore wings with three luteous-hyaline spots; two of them forming a short interrupted band beyond the middle, the hind one heart-shaped, the third smaller and near the tip. Hind wings with a brighter opaque luteous spot at the base. Abdomen before the middle with a broad luteous band, which is interrupted beneath and sometimes partly so above. Legs slender; hind tibiæ without median spurs. Length of the body 4—4½ lines; of the wings 11—12 lines.

a—g. North India. From Mr. Stevens' collection.

34. SYNTOMIS FULVESCENS.

Mas. *Fusca, brevis, subcylindrica, luteo-hirta*; antennæ nigrae subpectinatæ, apice albæ; abdomen apice albido-hirtum; alæ cupreo-fuscæ, sat latæ, anticæ maculis quatuor limpidis, posticæ disco margineque postico basali limpidæ.

Male. Body brown, short, nearly cylindrical, covered with luteous hairs. Antennæ black, short, stout, deeply serrated or very minutely pectinated beneath, attenuated towards the tips which are white above. Wings rather broad, cupreous brown. Fore wings with four large limpid spots in two oblique bands; first and second before the middle, nearly united and occupying nearly the whole breadth; third and fourth nearer the tips, more remote from each other and from the border; discal fold not apparent. Hind wings limpid in the disk and along the hind border towards the base. Abdomen with whitish hairs at the tip. Legs rather short; fore tibiæ dentated beneath; spurs of the hind tibiæ small. Length of the body 4 lines; of the wings 11 lines.

a. Congo. Presented by Sir J. Richardson.

Var. ? Described from an injured specimen. Black. Head yellow in front. Thorax covered with yellow hairs. Fore wings blackish? with a broad limpid band which contains the discal areolet, and with two large limpid spots; fore spot narrow; hind spot broad. Hind wings limpid, with blackish? borders. Abdomen with yellow hairs. Length of the body 4 lines; of the wings 11 lines.

a. South Africa. Presented by Dr. A. Smith.

35. SYNTOMIS PECTORALIS.

Viridis; caput antice album, proboscide palpis antennisque nigris, his apice albis; thorax antice albo bimaculatus, postice cocineo fasciatus; alæ limpidæ nigro marginatæ, anticæ nigro fasciatæ.

Dark green. Head white in front. Proboscis, palpi and antennæ black, the latter with white tips above. Thorax with a white spot on each side in front, and behind with a crimson band which extends over the base of the abdomen. Pectus crimson on each side. Wings limpid, with black borders. Fore wings with the tips black for near one-fourth of the length of the wing; a black band by the tip of the discal areolet, much widened towards the hind border, and connected by a stripe on the first inferior veinlet with the black of the tips. Length of the body $4\frac{1}{2}$ lines; of the wings 16 lines.

a. East Indies. From Archdeacon Clerk's collection.

36. SYNTOMIS MELAS?

Purpureo-fusca, albido varia; proboscide fulva, palpis antennisque nigris, his apice albis; abdomen albido subinterrupte fasciatum; alæ hyalinæ, longæ, subluridæ, marginibus venisque infuscatis.

Purplish brown. Head whitish in front, on each side and beneath. Proboscis tawny. Palpi and antennæ black, the latter white above towards the tips. An interrupted band on the prothorax, four broad stripes on the mesothorax and scutellum whitish. Wings hyaline, long, with a very slight lurid tinge, bordered with brown round the margin and along the veins, especially at the tips and across the tip of the discal areolet and along an opposite space of the hind border; a whitish streak along the hind border of the fore

wings, and another along the fore border of the hind wings. Abdomen nearly linear; segments from the first to the sixth with whitish bands which are partly interrupted above. Length of the body 10 lines; of the wings 28 lines.

a. Nepal. From the Hardwicke bequest.

37. SYNTOMIS MULTIGUTTA.

Nigra; antennæ subpectinatae; thorax luteo-hirtus; abdomen rufoluteum, e maculis nigris trivittatum, fasciis subtus interruptis nigris; alæ subluteo-hyalinae nigro marginatae et subfasciatae.

Black. Antennæ minutely pectinated beneath. Borders of the thorax with reddish luteous hairs. Wings hyaline with a slight luteous tinge. Fore wings with black tips; veins at the tip of the discal areolet bordered with black, forming a slight angle. Hind wings more deeply black at the tips and along part of the hind border, black also on the fore border. Abdomen reddish luteous with three rows of black spots; spots of the middle row large, transverse; under side with interrupted black bands. Length of the body 4 lines; of the wings 11 lines.

a. Nepal. Presented by General Sir T. Hardwicke.

38. SYNTOMIS? DIPTERA.

Alæ fuscae; anticae maculis quinque fenestratis; posticae brevissimae, macula flava.

Zygæna diptera, Fabr. Sp. Ins. ii. 165, 44; Mant. Ins. ii. 106, 54; Ent. Syst. iii. 1, 403, 59.

Sphinx Zygæna diptera, Gmel. ed. Syst. Nat. i. 5, 2398, 14, 8.
East Indies.

Genus 6. DYSAUXES.

Antennæ longiores, setiformes, maris vix sub-ciliatae. Alæ decussatae; anticae lanceolatae, sublatores, maculis semidiaphanis signatae; posticae brevissimae. Abdomen punctatum. Feminae mares adaequantes. Larvæ subdiales, lichenivoræ, obscure flavo maculatae. Pupa contracta.

Noctua, p., Linn.; Illig.

Bombyx, p., Fabr.; Gmel.; Panz.; Hübn.; Rossi; Borkh.

Hepialus, p., *Schr.*

Setina, p., *Schr.*

Lithosia, p., *Ochs.*

Dysauxes, *Hübner. Verz. Schmett.* 171.

Naclia, *Boisd. Genera et Index Méth. Eur. Lép.* 60, 6; *Herr. Schæff.*

1. DYSAUXES ANCILLA.

Alæ posticæ maris anticis concolores, innotata, famina flavæ, limbo omni et costis areolam mediam includentibus late fuscis.

Phalæna Noctua ancilla, *Linn. Syst. Nat.* i. 2, 855, 93. *Wien. Verz.* 69. *Fam. C.* 14. *Illig. N. Ausg. dess.* i. 183, 14; *Mag.* ii. 80, 14. *Geoffr. Hist. Ins.* ii. 168, 114. *Esp. Schmett. Eur.* iv. pl. 85; *Noct.* 6, f. 1, 2; *Pap. d'Eur.* vi. 58, pl. 223, f. 314, a—e; *Naturf.* iii. 8, pl. 1, f. 9. *Lang. Verz.* 2, 164, 1154, 1155.

Bombyx obscura, *Fabr. Sp. Ins.* ii. 206, 126; *Mant. Ins.* ii. 134, 217; *Ent. Syst.* iii. 1, 487, 259. *Schæff. Icon.* pl. 278, f. 4—7. *Nomencl. Panz.* 217. *Hübner. Bomb.* 129, 8, pl. 26, f. 114; pl. 57, f. 245; *Larv. Lep.* iii. *Bomb.* ii. *Veræ G.* f. 2, a. *Rossi, Faun. Etr. Mant.* ii. 20, 380. *Vieweg, Pl. Verz.* i. 64, 70.

Phalæna Bombyx Ancilla, *Gmel. ed. Syst. Nat.* i. 5, 2443, 93.

Bombyx ancilla, *Borkh. Eur. Schmett.* iii. 215, 66.

Hepialus Horta, *Schr. Faun. Boic.* ii. 1, 8, 306.

Setina Ancilla, *Schr. Faun. Boic.* ii. 2, 167, 17.

Dysauxes Ancilla, *Hübner. Verz. Schmett.* 171, 1763.

Lithosia Ancilla, *Ochs. Schmett. Eur.* iii. 157, 19.

Naclia Ancilla, *Boisd. Gen. et Ind. Méth. Eur. Lép.* 60. *Herr. Schæff. Samml. Eur. Schmett. Suppl.* ii. 50, 2.

a—e. Italy. From Dr. Leach's collection.

f. Europe. From M. Becker's collection.

g, h. Europe. From Mr. Milne's collection.

i. ———?

2. DYSAUXES PUNCTATA.

Alæ posticæ flavæ, limbo et areolæ mediæ apice fuscis.

Bombyx punctata, *Fabr. Sp. Ins.* 157; *Ent. Syst.* iii. 487, 250. *Rossi, Faun. Etr. Mant.* ii. 20, 381. *Borkh. Eur. Schmett.* iii. 217, 67.

Noctua ancilla, var. *Esp. Schmett.* iv. pl. 85, 6, f. 3, 51; *Pap. d'Eur.* vi. 16, pl. 223, f. 315, a, b.

Bombyx serva, *Hübner. Bomb.* 130, 9, pl. 26, f. 115; pl. 53, f. 226, 227.

Dysauxes confamula, *Hübner. Bomb.* 226, 227; *Verz. Schmett.* 171.

Lithosia punctata, *Ochs. Schmett. Eur.* iii. 119, 20, 1764.

Naelia punctata, *Boisd. Gen. et Ind. Méth. Eur. Léop.* 60. *Freyer. Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. 51, 3.

Var. *Lithosia famula*, *Freyer.*

South France. Ural.

a, b. Europe. From Dr. Friwaldsky's collection.

c, d. Europe. From M. Becker's collection.

3. DYSAUXES HYALINA.

Alæ posticæ hyalinæ, intus flavæ, limbo et areolæ mediæ apice fuscis.

Naelia hyalina, *Friwaldsky, Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. 51, 4, 1; *Bombycid.* f. 127.

Turkey.

Genus 7. GLAUCOPIS.

Corpus lineare, sæpissime gracile, subcylindricum. Palpi medioeres. Antennæ plerumque bipectinatæ. Alæ plerumque angustæ, marginibus fascia vittave coloratis.

Sphinx, p., *Linna.*

Zygæna, p., *Fabr.*

The numerous species of *Glaucopis* form several distinct groups which hereafter may be considered as genera.

Synopsis of the Species in the British Museum :—

- a. Four superior veinlets proceeding from the discal areolet. Subcostal vein emitting two forks. nigrigemma.
- aa. Only one superior veinlet proceeding from the discal areolet.
- b. Abdomen not contracted towards the base.
- c. Veins of the wings hairy.

- d. Tip of the discal areolet not clouded.
- e. Thorax black.
- f. Fore wings almost limpid, black along the hind border. *tristissima.*
- ff. Fore wings gray. *Bibia.*
- ee. Thorax luteous.
- f. Abdomen with a gray stripe. *afflicta.*
- ff. Abdomen without stripes.
- g. Fore wings almost limpid. *notabilis.*
- gg. Fore wings dark gray. *metamelas.*
- eee. Thorax with crimson dots. *trigutta.*
- f. Tip of the discal areolet clouded.
- g. Fore wings with a red spot at the base *albisigna.*
- gg. Fore wings with no red spots.
- h. Tip of the abdomen red. *erythrotelus.*
- hh. Tip of the abdomen not red.
- i. Abdomen with a red spot at the base.
- j. Hind wings whitish. *hæmatica.*
- jj. Hind wings grayish-hyaline. *dolens.*
- ii. Abdomen with a row of spots. *subaurata.*
confinis.
tenebrosa.
- iii. Hind wings with cupreous bands.
- cc. Veins of the wings not hairy.
- d. Fore wings much narrower towards the tips.
- dd. Fore wings slightly narrower towards the tips. *Sesiiformis.*
- e. Abdomen elliptical.
- f. Discal areolet not clouded. *xanthogastra.*
- ff. Discal areolet with a blue mark at the tip. *gemmifera.*
- fff. Discal areolet with a black mark at the tip.
- g. Abdomen white at the base. *completa.*
- gg. Abdomen not white at the base. *Taunus.*
- ee. Abdomen linear, or nearly so.
- f. Abdomen without tufts of hair on each side at the tip.
- g. Discal areolet without spots or bands at the tip.
- h. Abdomen with two rows of yellow spots.
- i. Antennæ black with luteous tips. *incendiaria.*
- ii. Antennæ luteous. *vespoides.*
- hh. Abdomen without yellow spots.
- i. Antennæ luteous.

- | | |
|--|--------------|
| j. Body black. | |
| k. Tarsi black. | pompiloïdes. |
| kk. Tarsi luteous. | varia. |
| jj. Body yellow. | Porphyrus. |
| ii. Antennæ black. | |
| j. Abdomen with blue spots. | |
| k. Tarsi yellow. | flavitaris. |
| kk. Tarsi black. | intensa. |
| jj. Abdomen without blue spots. | |
| k. Body black. | |
| l. Legs red. | subflamma. |
| ll. Legs black. | |
| m. Discal areolet with four inferior veinlets. | Deyrolii. |
| mm. Discal areolet with three inferior veinlets. | platyleuca. |
| kk. Body partly or wholly pale. | |
| l. Head and thorax wholly black. | Tengyra. |
| ll. Thorax pale, blackish in front. | singularis. |
| lll. Thorax pale with black stripes. | Bromus? |
| llll. Thorax wholly luteous. | Evadrus. |
| gg. Discal areolet clouded at the tip. | |
| h. Abdomen with blue spots. | |
| i. Antennæ with a white band. | acroxantha. |
| ii. Antennæ with no white band. | |
| j. Abdomen with no pale hairs or tomentum. | |
| k. Band not extending across the whole breadth of the fore wing. | |
| l. Abdomen with two rows of yellow spots. | ustrina. |
| ll. Abdomen without yellow spots. | |
| m. Tarsi white. | Pheres. |
| mm. Tarsi black. | |
| n. Thorax with no pale stripes. | Enagrus. |
| nn. Thorax with two pale stripes. | |
| o. Black of the tip of the fore wing with a straight outline. | remota. |
| oo. Black of the tip of the forewing with an angular outline. | festiva. |
| kk. Band extending across the whole breadth of the fore wing. | ornatula. |
| jj. Abdomen with some pale hairs or tomentum. | |
| k. Band not extending across the whole breadth of the forewing. | |
| l. Legs pale. | |
| m. Fore wings without red in the disk. | |

- n. Antennæ with white tips. Omphale.
- nn. Antennæ wholly black. Telephas.
- o. Discal areolet hardly clouded. impar.
- oo. Discal areolet with a broad black band. Teuthras.
- mm. Fore wings with a red spot in the disk. Chrysis.
- ll. Legs black.
- m. Abdomen with orange hairs at the base.
- mm. Abdomen with red or orange tomentum along half the length or more.
- n. Abdomen partly red along the whole length. sanguinea.
- nn. Abdomen partly red along half the length. Eone.
- nnn. Abdomen mostly orange. Tyrrhius.
- kk. Band extending across the whole breadth of the fore wing.
- l. Legs black. centralis.
- ll. Legs mostly pale. varipes.
- hh. Abdomen with no blue spots.
- i. The black of the tip of the fore wing extending over part of the discal areolet.
- j. Thorax with testaceous hairs. Astyoche.
- jj. Thorax without testaceous hairs. melaleuca.
- ii. The black of the tip of the fore wing distinct from the band of the discal areolet.
- j. Band extending across the whole breadth of the fore wing.
- k. Legs black.
- l. Abdomen with a testaceous band latilinea.
- ll. Abdomen with six testaceous bands. picta.
- kk. Legs pale.
- l. Abdomen with a brown disk. dorsalis.
- ll. Abdomen with several luteous bands. torrida.
- lll. Abdomen with two rows of red spots. Teda.
- llll. Abdomen red, with a black tip. albiventris.
- jj. Band not extending wholly across the fore wing.
- k. Abdomen with red spots. erythrarchos.
- kk. Abdomen without spots.
- l. Wings with no red or luteous marks.
- m. Abdomen testaceous, with no black spot at the base. braconoïdes.
- mm. Abdomen testaceous in front, with a black spot at the base. postica.
- mmm. Abdomen with a brown disk. discifera.

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| mmmm. | Abdomen with many slender white bands. | multicincta. |
| ll. | Fore wings with a crimson spot. | Columbina. |
| lll. | Wings luteous towards the base. | basilutea. |
| ff. | Abdomen with tufts of hairs on each side at the tip. | |
| g. | Abdomen with luteous spots on each side. | consors. |
| gg. | Abdomen with no luteous spots. | |
| h. | Abdomen with no red hairs. | sortita. |
| hh. | Abdomen with red hairs. | |
| i. | Abdomen with white spots. | stipata. |
| ii. | Abdomen with green spots. | |
| j. | Hind wings with a broad black border. | |
| k. | Tip of the abdomen red for one-eighth of the length. | leucaspis. |
| kk. | Tip of the abdomen red for nearly one-fourth of the length. | sanguiflua. |
| jj. | Hind wings with a narrow black border. | frontalis. |
| gg. | Hind wings without spots. | |
| h. | Hind wings with a red band at the base. | hæmorrhoidalis. |
| hh. | Hind wings with no red band at the base. | |
| i. | Hind wings with red hairs along each side. | Auge. |
| ii. | Abdomen with no red hairs along each side. | |
| bb. | Abdomen contracted towards the base. | |
| c. | Tip of the abdomen tufted. | |
| d. | Tip of the abdomen with red hairs. | |
| e. | Hind wings with very broad black borders. | finalis. |
| ee. | Hind wings hardly bordered with black. | Ophion. |
| dd. | Tip of the abdomen with black hairs. | |
| e. | Abdomen with no appendage. | clavata. |
| ee. | Abdomen with a long hairy appendage. | |
| f. | Band of the fore wing extremely broad. | latifascia. |
| ff. | Band of the fore wing rather slender. | coarctata. |
| fff. | Band of the fore wing extremely slight. | Esmeralda. |
| cc. | Abdomen not tufted. | |
| d. | Petiole stout. | melas. |
| dd. | Petiole slender. | |
| e. | Colour pale. | |
| f. | Wings limpid. | |
| g. | Antennæ black towards the base. | Zethus. |
| gg. | Antennæ pale towards the base. | testacea. |
| ff. | Wings purple in front. | Polistes. |

ee. Black; abdomen luteous.	metaxanthus.
eee. Black; head red.	ruficeps.
eeee. Black.	tarsalis.
eeeee. Dark blue.	semihyalina.

Group 1. NORTHIA.

Corpus breve, latum. Palpi breves; articulus 3us parvus, conicus. Alæ anticæ latæ; areola discalis lata, venulas quatuor anticas emittens, venula apicali fere recta; plica discalis omnino distincta; vena subcostalis furcas duas emittens. Tibiæ anticæ non dentatæ; posticæ calcaribus mediis nullis, apicalibus parvis.

Male. Body short, broad. Palpi short; third joint small, conical. Antennæ a little longer than the body, thickly but not deeply plumose beneath. Wings broad. Fore wings long, full twice the length of the hind wings; discal areolet broad, its apical veinlet almost straight; discal fold distinct along its whole length. Abdomen short, nearly linear, narrower than the thorax. Legs rather stout; fore tibiæ not dentate beneath; hind tibiæ with no middle spurs, their apical pair small.

Fem. Antennæ stout, pectinated beneath to the tips. Legs slender.

Very distinct from all the following groups on account of the fore branches of the subcostal vein.

1. GLAUCOPIS NIGRIGEMMA.

Mas. *Nigra; capite, antennis, thorace antico pectoreque cyaneis; abdomen apicem versus cupreum et aureo-viride; alæ anticæ cinereo-hyalinæ nigro marginatæ et fasciatæ; posticæ nigre viridi-squamosæ macula subapicali cinereo-hyalina.*

Male. Black. Head, antennæ, fore part of thorax and pectus bright blue or green. Proboscis testaceous. Fore wings grayish hyaline, black at the base where there are a few green scales, and with a black border; a black mark across the tip of the discal areolet. Hind wings black, mostly covered beneath with green scales; a grayish hyaline spot near the tip. Abdomen cupreous and golden-green above near the tip which is clothed with pale testaceous hairs. Length of the body 6 lines; of the wings 18 lines.

a. North China. From Mr. Cuming's collection.

Female. Body, antennæ and legs bluish green. Wings limpid; fore wings blackish brown with bluish green scales towards the base and towards the tips and along the hind border; hind wings the same colour in front and at the tips and along the hind border. Length of the body 5 lines; of the wings 16 lines.

a. China. From Mr. Stevens' collection.

b. North China. From Mr. Cuming's collection.

2. GLAUCOPIS? AUXO.

Alæ antica cyaneo-nigræ, fasciis duabus alternis; postica albæ, limbo nigro.

Sphinx Zygæna Auxo, *Gmel. ed. Syst. Nat. i. 5, 2390, 33.*

China.

Group 2. PSEUDOMYA.

Corpus sat breve, atrum, coloribus variis micans. Palpi capite breviores; articulus 3us parvus, conicus, acuminatus. Abdomen subfusiforme. Alæ angustæ, hyalinæ, nigro marginatæ, venis squamosis, plica discali areolæ discalis apicem versus conspicua. Pedes graciles; tibiæ posticæ calcaribus quatuor minimis.

Pseudomya, Hübn.

Body rather short, deep black, with metallic and other hues. Palpi shorter than the head; third joint small, conical, pointed. Abdomen subfusiform. Wings narrow, hyaline, with black borders; veins squamose; discal fold conspicuous along the terminal half of the discal areolet, not elsewhere. Legs slender; hind tibiæ with four very minute spurs.

3. GLAUCOPIS TRISTISSIMA.

Atra; alæ subhyalinæ, venis et margine undique nigris. Long. alar. 12 lin.

Glaucopis tristissima, Perty, Delect. Anim. Artic. Bras. 156, pl. 31, f. 7.

Var.? Mas. *Atra; caput viride, subtus album; antennæ sat late pectinatæ; thorax viridi bimaculatus; pectus viride-rufo biguttatum; abdomen basi apiceque viride, subtus album; alæ cinereo-hyalinæ nigro marginatæ, venis nigro marginatis.*

Male. Deep black. Head partly bright green above, white beneath. Palpi rather short; third joint small, conical, not more than one-third of the length of the second. Antennæ rather deeply pectinated. Thorax with a bright green spot on each side in front. Pectus mostly emerald-green, with a bright red dot by the base of each fore wing. Wings grayish hyaline, with black borders; veins strongly marked, slightly bordered with black. Fore wings with a broad black border between the base and the posterior angle; veinlets at the tip of the discal areolet forming an almost right angle; discal fold apparent on near half the length of the discal areolet but not beyond it. Abdomen bright green on each side at the base and at the tip; under side white. Legs moderately stout; fore tibiæ dentate beneath; middle and apical spurs of the hind tibiæ rather short.

Fem. Antennæ serrated. Fore wings with black streaks between the veins towards the tips.

a—e. Paræ. From Mr. Bates' collection.

4. GLAUCOPIS TIPULINA.

Nigro-viridis; alæ cinereo-hyalinæ, marginibus venisque nigris.

Glaucopis unicolor Tipulina, Hübn. Samml. Exot. Schmett. i. Lép.

ii. *Sphing.* i. *Pap.* iii. *Glaucopes A. unicolores a*, f. 1—4.

Pseudomya Tipulina, Hübn. Verz. Schmett. 124, 1345.

5. GLAUCOPIS BIBIA.

Atra; caput cyaneo varium; antennæ maris sat late pectinatæ, fœminæ subpectinatæ; abdomen vitta dorsali et segmentorum marginibus posticis cinereis; alæ cinereæ nigro strigatæ et marginatæ; anticæ basi cyaneo notatæ.

Glaucopis Bibia, MSS.

Male and female. Deep black. Head partly blue in front. Palpi rather long, slightly curved; third joint not one-third of the length of the second. Antennæ of the male rather deeply, of the female slightly, pectinated. Wings gray, and with black streaks between the veins at the tips, black at the base; veins strongly marked, slightly bordered with black. Fore wings with some blue marks at the base; veinlets at the tip of the discal areolet forming a slightly acute angle; discal fold distinct along the whole length, almost joining the first inferior veinlet. Dorsal stripe of the abdo-

men and hind borders of the segments gray. Legs moderately stout; fore tibiæ slightly dentated beneath; middle and apical spurs of the hind tibiæ small. *Male*. Wings darker gray towards the tips. Length of the body 4 lines; of the wings 10 lines.

a—d. Parà. From Mr. Bates' collection.

e. Brazil. From M. Becker's collection.

f, g. ———?

6. GLAUCOPIS AFFLICTA.

Atra; caput cyaneo varium; antennæ maris late pectinatæ, fœminæ subpectinatæ; thorax ochraceo-hirtus; abdomen vitta cinerea dorsali; alæ cinereo-hyalinæ, nigro marginatæ, anticæ basi cyaneo notatæ.

Male and female. Deep black. Head partly blue above. Palpi long; third joint less than half the length of the second. Antennæ of the male deeply, of the female slightly, pectinated. Thorax clothed with orange-tawny hairs. Wings grayish hyaline, with blackish borders. Fore wings marked with blue at the base; transverse veinlets of the discal areolet forming an almost right angle; discal fold distinct towards the tip of the discal areolet and beyond where it approaches very near the first inferior veinlet. Abdomen with a dark gray dorsal stripe. Legs moderately stout; fore tibiæ dentate beneath; spurs of the hind tibiæ short. *Male*. Fore wings blackish towards the base. Abdomen linear. *Fem.* Fore wings black at the base. Abdomen subfusiform. Length of the body 4 lines; of the wings 10 lines.

a—c. Parà. From Mr. Bates' collection.

7. GLAUCOPIS NOTABILIS.

Mas. Nigra; caput albo fasciatum; antennæ pectinatæ; thorax ochraceo-hirtus, antice albido bimaculatus; pectus albo vittatum; abdomen subtus album; alæ anticæ sat latæ cinereo-hyalinæ nigro marginatæ; posticæ minimæ, fusæ, nigro marginatæ.

Male. Head white about the eyes and with a white band in front. Palpi rather long, slightly curved; third joint about one-fourth of the length of the second. Antennæ moderately pectinated. Thorax and pectus clothed with orange-tawny hairs; two whitish lobes in front of the thorax. Pectus with a white stripe. Fore

wings rather broad, grayish hyaline, with narrow black borders in front and from the tips to the hind angle, and with very broad black borders from thence to the base; a black streak in each areolet at the tip of the wing; transverse veinlets of the discal areolet forming an obtuse angle; discal fold very distinct towards the tip of the discal areolet and beyond it to the tip of the wing; under side of the hind border white in front, blackish behind. Hind wings very small, brown with black borders; a whitish tinge on the disk above. Abdomen linear, white beneath. Legs mostly covered with white tomentum; fore tibiæ dentate beneath. Length of the body 5 lines; of the wings 12 lines.

a. Parà. From Mr. Bates' collection.

8. GLAUCOPIS METAMELAS.

Mas. *Atra*; caput supra ochraceo-hirtum; antennæ sat late pectinatæ; thorax ochraceo-hirtus; pectus albidum; alæ cinereæ nigro marginatæ.

Male. Deep black. Head above and thorax clothed with orange-tawny hairs. Palpi rather long, curved; third joint not more than one-fourth of the length of the second. Antennæ moderately deeply pectinated. Pectus whitish. Fore wings black, narrow, dark gray in the disk; veinlets of the tip of the discal areolet forming a slightly acute angle; discal fold distinct along the whole length. Hind wings grayish hyaline with broad black borders. Abdomen slightly tapering from the base to the tip. Legs rather stout; fore tibiæ dentate beneath; middle and apical spurs of the hind tibiæ rather long. Length of the body 5 lines; of the wings 12 lines.

a. Parà. Presented by Reginald Graham Esq.

b, c. Parà. From Mr. Bates' collection.

9. GLAUCOPIS TRIGUTTA.

Mas. *Obscure fusca*; caput subtus albidum; thorax coccineo trimaculatus; alæ anticæ cinereæ basi apiceque fusæ; posticæ fusæ macula antica cinerea.

Male. Dark brown. Head whitish beneath. Palpi short; third joint small, conical. Antennæ rather minutely pectinated. Thorax with a crimson spot on each shoulder and a larger one on the scutellum. Fore wings gray, dark brown at the base, at the tips

and behind the discal areolet; discal areolet veinlet forming a slightly acute angle; discal fold distinct in the apical half of the discal areolet, but not apparent beyond it. Hind wings dark brown, with a gray spot in front of the disk. Abdomen rather short, nearly linear; appendages large, testaceous. Legs rather stout; fore coxæ white beneath; fore tibiæ minutely dentate; spurs of the hind tibiæ long. Length of the body $3\frac{1}{2}$ lines; of the wings 10 lines.

α. Santa Fé de Bogota. From M. Parzudaki's collection.

Group 3. PHEIA.

Corpus gracile, sublineare, rufo, albo et nonnunquam metallico varium. Palpi caput non superantes; articulus 3us parvus, conicus. Antennæ maris usque ad apices serratæ. Alæ angustæ, hyalinæ, marginibus nigris; anticæ fascia apud areolæ discalis apicem nigra. Pedes graciles, tibiæ posticæ calcaribus quatuor minutis.

Body slender, nearly linear, black, with red or white and occasionally with metallic green marks. Palpi not rising above the head; third joint small, conical. Antennæ of the male serrated to the tips. Wings narrow, hyaline, with black borders; fore wings with a black band across the tip of the discal areolet. Legs slender; hind tibiæ with four minute spurs.

10. GLAUCOPIS ALBISIGNA.

Mas. *Nigro-fusca, gracilis; antennæ graciles, serratæ, apice albæ; thorax rufo quadrimaculatus; pectus albo bimaculatum; abdomen subfusiforme, basi album subcontractum; alæ limpide nigro-fusco marginatæ; anticæ subangustæ basi rufo maculatæ nigro subfasciatæ.*

Male. Blackish brown, rather slender. Palpi rather long, very slightly curved; third joint conical at the tip, about one-third of the length of the second. Antennæ slender, serrated beneath; white above towards the tips. Thorax with two red spots in front, and one by the base of each fore wing. Pectus with a white spot on each side. Wings limpid, with a narrow blackish brown border. Fore wings rather narrow, with a red spot on each at the base; their tips blackish for about one-fifth of the length; a blackish mark across the tip of the discal areolet, and a slight widening of the blackish border opposite; discal fold very indistinct along the whole length

Abdomen slightly contracted near the base, fusiform from thence to the tip, with a large subquadrate transverse white spot at the base; under side white for one-third of the length near the base. Legs partly powdered with white towards the base; fore tibiæ dentated beneath; spurs of the hind tibiæ moderately long. Length of the body 5 lines; of the wings 12 lines.

a. Honduras. From Mr. Miller's collection.

11. GLAUCOPIS ERYTHROTELUS.

Mas. *Obscure fusca; caput postice rufo-hirtum; palpi subtus albidi; antennæ pectinatæ; thorax antice rufo-hirtus; pectus rufo bimaculatum; abdomen apice rufum, subtus testaceum; alæ albido-hyalinæ nigro-fusco marginatæ; anticæ dimidio apicali macula hyalina excepta fusco, posticæ latæ; pedes testacei.*

Male. Dark brown. Head clothed behind and thorax in front with red hairs. Proboscis testaceous. Palpi curved, whitish beneath, rather long; third joint hardly one-fourth of the length of the second. Antennæ moderately pectinated. Pectus with a red spot on each side in front. Wings hyaline, slightly whitish with opaline lustre, and with dark brown borders. Fore wings brown for nearly half the length from the tips, with the exception of a hyaline spot near the fore border; discal fold very distinct along the whole length. Hind wings broad; brown along the hind border irregularly broad. Abdomen red at the tip, testaceous beneath; appendages testaceous. Legs testaceous; coxæ and femora partly white; fore tibiæ dentated beneath; spurs of the hind tibiæ rather long. Length of the body 5 lines; of the wings 13 lines.

a. Parà. Presented by Gordon Graham, Esq.

12. GLAUCOPIS HÆMATICA.

Nigra; thorax maculis duabus humeralibus unaque postica coccineis; alæ anticæ nigricantes fascia latissima subhyalina; posticæ subhyalinæ margine postico apiceque nigricantibus. Long. alar. 13 lin.

Glaucopis hæmatica, Perty, Delect. Anim. Artic. Bras. 156, pl. 31, f. 6.

a, b. Brazil.

Male. Brown, slender, linear. Head wanting. Thorax with a red spot on each side by the base of the fore wing. Pectus whitish. Fore wings slightly grayish hyaline, with brown borders which are broadest behind; tips brown for more than one-fourth of the length of the wing; a brown slightly oblique band widened behind across the tip of the discal areolet; discal areolet-veinlet forming a slightly acute angle; discal fold distinct along the whole length. Hind wings white and with white veins brown at the tips and along the hind borders. Abdomen with a row of blue spots along each side; at the base with a red conical spot in the middle and a white spot on each side; under side mostly white; appendages testaceous. Legs moderately stout; fore tibiæ slightly dentate beneath; middle and apical spurs of the hind tibiæ very small. Length of the body 4 lines; of the wings 12 lines.

a. ———?

13. GLAUCOPIS DOLENS.

Mas. *Nigro-fusca, gracilis, cyaneo varia; antennæ sat pectinatæ; thorax rufo bimaculatus; alæ subcinereo-hyalinæ, fusco marginatæ; abdomen macula basali rufa maculisque lateralibus cyaneis, subtus album.*

Male. Blackish brown, slender. Head paler, partly blue on each side. Palpi rather long; third joint acuminate, about half the length of the second. Antennæ moderately pectinate. Thorax blue on each side in front, and with a red spot at the base of each fore wing. Pectus whitish. Wings grayish hyaline with brown borders. Fore wings brown at the tips for one-fifth of the length, and with a brown spot across the tip of the discal areolet, opposite to which the brown hind border is slightly widened; discal areolet-veinlet forming an almost right angle; discal fold distinct towards the tip of the discal areolet, hardly visible elsewhere. Hind wings brown about the middle of the hind border as far as the middle of the breadth. Abdomen with a red spot at the base, and with a row of blue spots along each side; under side white except near the tip; appendages testaceous. Legs moderately stout, partly covered with white tomentum; fore tibiæ slightly dentate; middle and apical spur of the hind tibiæ small. Length of the body $3\frac{1}{2}$ lines; of the wings 10 lines.

a. Parâ. From Mr. Bates' collection.

14. GLAUCOPIS SUBAURATA.

Fusca, aurata, gracilis, linearis; palpi fulvi; antennæ nigrae, late pectinatae; scutellum flavum; pectus ferrugineum; abdomen guttis dorsalibus flavis; alæ sat latæ discis limpidis.

Brown, gilded, slender, linear. Palpi short, tawny. Antennæ black, deeply pectinated. Scutellum yellow. Pectus ferruginous. Wings moderately broad; disk irregularly limpid. Fore wings with the limpid part divided by the veins into seven compartments, three larger ones near the base, four smaller ones towards the tips. Hind wings with the limpid part in four compartments. Abdomen with a row of yellow dots on the back. Legs moderately stout; fore tibiæ with a very stout spine; hind tibiæ with no middle spurs. Length of the body $3\frac{1}{2}$ lines; of the wings 9 lines.

Allied to *Syntomis*.

α. Ceylon. Presented by R. Templeton, Esq.

Group 4. ERESSA.

Corpus gracile, fuscum, lineare, flavo maculatum. Palpi breviusculi. Antennæ maris sat late pectinatæ. Abdomen longum. Alæ angustæ, limpidæ, marginibus fuscis. Pedes graciles; tibiæ anticæ subtus dentatæ; posticæ calcaribus mediis nullis, apicalibus parvis.

Body slender, brown, linear, with yellow spots. Palpi rather short. Antennæ rather deeply pectinated. Abdomen long. Wings rather narrow, limpid; borders deeply but irregularly brown. Legs slender; fore tibiæ dentate beneath; hind tibiæ with no middle spurs, their apical spurs small.

15. GLAUCOPIS CONFINIS.

Fusca, linearis; caput flavo bimaculatum; antennæ nigrae; thorax macula antica scutelloque flavis; abdomen e maculis flavis trivittatum; alæ latæ, limpidæ, fusco marginatæ.

Brown, linear. Antennæ black. Head with a yellow spot on each side. A large spot in front of the thorax and scutellum yellow. Wings broad; disks irregularly limpid. Fore wings with the limpid part divided by the veins into seven compartments as in *G. subaurata*, but somewhat differently shaped, with a more even outline and

occupying a larger space. Hind wings with the limpid part more regular, in four compartments. Abdomen with three rows of yellow spots. Legs moderately stout; fore tibiæ with a very stout spine; hind tibiæ with no middle spurs. Very near allied to *G. subaurata*. Length of the body 4 lines; of the wings 11 lines.

a. North India. From Mr Stevens' collection.

Group 5. PHACUSA.

Corpus gracile, lineare, sat longum, nigrum, auratum. Antennæ maris latissime pectinatæ. Abdomen maris apud medium vix compressum, apice subdilatatum et fasciculatum. Alæ longæ, sat latæ, hyalinæ, nigro marginatæ; anticæ nigro unifasciatæ et univittatæ. Pedes graciles; tibiæ anticæ subtus edentatæ; posticæ calcaribus mediis nullis, apicalibus minimis.

Body slender, linear, rather long, black, gilded. Palpi short. Proboscis rather short. Antennæ of the male very deeply pectinated. Abdomen of the male slightly dilated and tufted at the tip, hardly compressed in the middle. Wings long, moderately broad, hyaline, with black borders and with a black band and a black stripe in the disk. Legs slender; fore tibiæ not dentate beneath; hind tibiæ with no middle, and very small apical, spurs.

Approaches *Procris* and *Ctenucha*.

16. GLAUCOPIS TENEBROSA.

Mas. *Purpurea, gracilis, linearis, aureo varia; caput antice testaceum; antennæ nigrae, late pectinatæ; abdomen fasciis auratis ornatum; alæ longæ, sat latæ; anticæ cinereo-hyalinæ purpureo marginatæ et fasciatæ; posticæ purpureæ maculis duabus magnis cinereo-hyalinis.*

Male. Dark purple, slender, linear. Head in front and proboscis testaceous. Antennæ black, deeply pectinated, branches hairy. Thorax gilded in front and behind. Pectus gilded on each side. Wings long, moderately broad. Fore wings gilded at the base, their disks mostly grayish hyaline with the exception of a middle stripe and of a band across the end of the discal areolet, where the transverse veinlets form an obtuse angle; discal fold distinct along the whole length. Hind wings with two large grayish hyaline spots. Abdomen with a broad gilded band on each segment except at the tip. Legs blackish, slender; hind tibiæ with no middle spurs, their

apical spurs small. Length of the body 5 lines; of the wings 16 lines.

a, b. North India. From Mr. Stevens' collection.

Group 6. SAROSA.

Mas. Corpus robustum, elongato-subfusiforme, ex parte metallicum. Palpi longiusculi, subarcuati; articulus 3us parvus. Antennæ setaceæ, latissime pectinatæ apice serratæ. Alæ limpidæ, nigro marginatæ; anticæ apices versus valde angustatæ; plica discalis omnino distincta. Pedes validi; tibiæ anticæ subtus dentatæ, posticæ calcaribus quatuor sat longis.

Male. Body stout, partly metallic, elongate subfusiform. Palpi rather long, slightly curved, third joint small. Antennæ setaceous, very deeply pectinated, serrated at the tips. Wings limpid, with black borders; fore wings much narrowed towards the tips; discal fold distinct along the whole length. Legs stout; fore tibiæ dentate beneath; hind tibiæ with four moderately long spurs.

Allied to *Euchromia ignita*.

17. GLAUCOPIS SESIIFORMIS.

Nigra, valida, cyaneo varia, flavo-hirta; antennæ latissime pectinatæ; abdomen e maculis cyaneis bivittatum, fasciisque flavo-pilosis ornatum; alæ hyalinæ subluridæ marginibus nigrofuscis, anticæ basi cyaneæ; tarsi posteriores flavi.

Black, rather stout. Head with yellow hairs, blue above behind the antennæ. Palpi rather long, slightly curved; third joint very small, not one-fourth of the length of the second. Antennæ setaceous, very deeply pectinated. Thorax bright blue in front, with stripes of alternate brown and yellow hairs. Pectus partly blue. Wings hyaline, with a very slight lurid tinge, and with blackish brown borders which are widened near the base of the hind borders in all the wings and at the tips of the fore wings; fore wings blue at the base; terminal veinlets of the discal areolet forming a nearly right angle; discal fold apparent near the tip of the discal areolet and from thence to the tip of the wing. Abdomen rather short, slightly tapering towards the tip, with two rows of blue spots, and with a band of yellow hairs on the fore border of each segment both above and below. Legs moderately stout, partly blue; spurs of the

hind tibiæ moderately long; posterior tarsi yellow, black at the base. Length of the body 7 lines; of the wings 18 lines.

a. Venezuela. From Mr. Dyson's collection.

18. GLAUCOPIS XANTHOGASTRA.

Atra, cæruleo-micans; alæ limpidæ, nigro marginatæ; abdomen aurantiacum, basi nigrum. Long. alar. 20 lin.

Glaucopis xanthogastra, Perty, Delect. Anim. Artic. Bras. 156, pl. 31, f. 5.

a. Brazil. From Mr. Stevens' collection.

Group 7. GYMNELIA.

Corpus valde robustum. Palpi mediocres; articulus 3us parvus, longi-conicus, 2o triplo brevior. Antennæ maris pectinatæ, foeminæ subpectinatæ. Alæ sat latæ, hyalinæ, marginibus obæcuris; anticæ striga transversa discali; plica discalis distincta. Pedes validiusculi; tibiæ posticæ calcaribus sat longis.

Gymnelia, MSS.

Body very stout. Palpi moderately long; third joint rather small, elongate-conical, not more than one-third of the length of the second. Antennæ of the male moderately, of the female slightly pectinated to the tips. Wings rather broad, hyaline, with the exception of the borders, and a transverse mark in each disk; discal fold distinct. Abdomen very broad, obconical towards the tip. Legs moderately stout; spurs of the hind tibiæ rather long.

Allied to *Euchromia hirsuta*.

19. GLAUCOPIS GEMMIFERA.

Atra; caput viride subtus; thorax et abdomen basi rufo-hirta; thorax viridi maculatus; abdomen aureo-viride fasciis vittaque dorsali fasciculis rufis ornato atris, subtus e maculis viridibus bivittatum pilisque rufis unifasciatum; alæ luridæ nigro marginatæ, anticæ fascia cyanea nigro marginata.

Deep black, broader than *G. Lænnus*. Head green above, clothed beneath like the thorax and the base of the abdomen with red hairs. Thorax green in front, with two green spots on the disk, and one on

the scutellum. Fore wings bright lurid, with a slender black border, excepting the front between the base and the tip of the discal areolet, across whose tip there is a black mark with a blue disk; border broad at the tips. Hind wings with a very slight lurid tinge; borders black; a blue stripe beneath in front. Abdomen golden-green above with the exception of the sides, the borders of the segments, and a dorsal stripe, on which are two patches of red hairs; base clothed with red hairs; under side with a row of green spots along each side, and a band of red hairs across the middle. Legs partly blue; coxæ, femora and fore tibiæ partly clothed with red hairs. Length of the body 9 lines; of the wings 25 lines.

a. Venezuela. From Mr. Dyson's collection.

20. GLAUCOPIS COMPLETA.

Mas. *Atra, brevis, fusiformis; caput albo notatum, postice cyaneum; thorax maculis duabus anticis cyaneis duabusque lateralibus albis; pectus albo maculatum; abdomen basi albo fasciatum, lateribus cyaneo varium maculisque transversis rufis bivittatum, apice rufum, subtus fasciis testaceis; alæ limpidæ, apicibus marginibusque posticis nigris, anticæ nigro subfasciatæ.*

Male. Deep black, short, broad, fusiform. Head marked with white, blue behind. Palpi rather long, slightly curved; third joint not more than one-sixth of the length of the second. Antennæ rather deeply pectinated. Thorax with two blue spots in front and with a white spot on each side. Pectus with white spots. Wings limpid, with opaline lustre and with broad black hind borders; tips black for one-fifth of the length. Fore wings broad, with a curved black mark on the tip of the discal areolet; discal fold distinct along the whole length; veins strongly marked. Abdomen subfusiform, with a very broad white band at the base partly blue, and with a row of transverse red spots along each side; tip red; under side with a very broad angular white band near the base and with testaceous bands from thence to the tip. Legs stout; middle and apical spurs of the hind tibiæ rather short. Length of the body $5\frac{1}{2}$ lines; of the wings 18 lines.

a. Parà. Presented by J. P. G. Smith, Esq.

21. GLAUCOPIS LÆNNUS.

Atra; caput supra cyaneum; thorax antice maculis duabus cyaneis duabusque albis; abdomen e maculis transversis cyaneis bivittatum, triente apicali aurantiaca nonnunquam nigro vittata; alæ limpidæ aut vix subluridæ, nigro marginatæ et fasciatæ.

Gynelia Lænnus, *MSS.*

Deep black. Head blue above. Thorax in front with two blue spots between two white spots. Wings limpid, or with a very slight lurid tinge; borders rather deeply black. Fore wings with a black band across the tip of the discal areolet; discal fold distinct, occasionally in contact with the first inferior vein. Hind wings with a curved black band across the middle. Abdomen with transverse blue spots along each side, orange for full one-third of the length from the tip. Length of the body 6—9 lines; of the wings 19—24 lines.

Var. β. An interrupted black stripe on the orange parts.

- a.* Rio Janeiro. From Mr. Stevens' collection.
- b.* Brazil. From Mr. Stevens' collection.
- c.* Brazil. From M. Becker's collection.

Group 8. ISANTHRENE.

Corpus cylindricum. Palpi sat longi; articulus 2us brevis, gracilis. Antennæ subtus subpectinatæ, apices versus serratæ. Abdomen lineare. Alæ limpidæ, nigro marginatæ et nonnunquam fasciatæ; areola discalis venulas quinque emittens; plica discalis omnino conspicua. Pedes sat validi; tibiæ posticæ spinis medio-cribus.

Isanthrene, Hübn. Verz. Schmett. 125.

Body cylindrical. Palpi rather long; second joint rather short and slender. Antennæ slightly pectinated beneath, serrated near the tips. Wings hyaline, more or less bordered with black, and in some species with a black band on the base of the discal areolet. Discal areolet emitting five veins, discal fold distinct along the whole length. Abdomen linear. Legs rather stout; median and apical spines of the hind tibiæ of moderate length. Especially distinguished by the cylindrical abdomen.

22. GLAUCOPIS FLAVICORNIS.

Alæ flavo-hyalinæ; anticæ apice fuscæ; corpus cyaneum flavo maculatum; antennæ pedesque flava.

Sphinx flavicornis, *Fabr. Mant. Ins.* ii. 104, 25; *Ent. Syst.* iii. 394, 27.

Sphinx Zygæna flavicornis, *Gmel. ed. Syst. Nat.* i. 5, 2395, 127.

Glaucopis hyalina incendiaria, *Hübner*.

Isanthrene flavicornis, *Hübner. Verz. Schmett.* 125, 1358.

Cayenne.

23. GLAUCOPIS PERBOSCII.

Nigra, cyaneo-micans; antennæ fulvæ; abdomen basi maculis sex flavis; alæ flavo-hyalinæ, venis nigris, anticæ marginibus apicibusque nigris; posticæ striga laterali ochracea, margine interno nigro lineato; coxæ posticæ extus macula flava.

Glaucopis Perbosicii, *Guér. Icon. Règne Anim. Ins. Texte*, 501.

Campeachy Bay.

24. GLAUCOPIS CHALCIOPE.

Cyanea; antennæ luteæ; abdominis latera albo guttata; alæ limpidæ nigro marginatæ; anticæ nigro unifasciatæ.

Isanthrene Chalciope, *Hübner. Samml. Exot. Schmett.* 23, 235, f. 469, 470.

Havannah.

25. GLAUCOPIS VESPOIDES.

Atra, flavo varia; proboscis testacea; palpi fulvi; antennæ rufæ, sat longe pectinatæ, dimidio basali nigro; alæ anticæ luteo-hyalinæ nigro marginatæ; posticæ nigræ; abdomen apice cyaneum; subtus e maculis albis vittatum.

Deep black. Head yellow in front, with a yellow dot on the vertex, and with a yellow hind band which is interrupted on each side above. Proboscis testaceous. Palpi pale tawny, rather long and slender; third joint conical at the tip, about one-fourth of the length of the second. Antennæ red, moderately pectinated, black

above for more than half the length from the base. Prothorax yellow beneath, and with a yellow spot on each side above. Mesothorax with two yellow spots in front, with two behind, and with three yellow dorsal stripes, the side pair oblique. Pectus with two oblique yellow stripes on each side. Wings luteous-hyaline. Fore wings bordered with black towards the tips which are widely black, and with a luteous black-bordered stripe along part of the hind border; terminal veinlets of the discal areolet forming an obtuse angle; discal fold distinct along its whole length, and very near to the first inferior veinlet; a small black mark between the tips of the fourth inferior veinlet and of the submedian vein. Hind wings black above, luteous beneath in front and behind. Abdomen linear, with four yellow spots at the base; from thence to beyond the middle there are three interrupted yellow bands, and on each side three yellow spots; three apical segments blue; under side with a row of white spots on the disk. Legs luteous, moderately stout; femora and hind legs black above, the former partly black beneath; spurs of the hind tibiæ rather small. Length of the body 8 lines; of the wings 22 lines.

a. Parà. From Mr. Stevens' collection.

26. GLAUCOPIS POMPILOIDES.

Atra; antennæ luteæ, sat late pectinatæ; pectus flavo bistrigatum; alæ lurido-hyalinæ, marginibus posticis nigris; abdominis segmentum 1um luteo biguttatum; coxæ extus albæ.

Deep black. Palpi rather long, nearly straight; third joint slender, conical at the tip, about one-third of the length of the second. Antennæ bright luteous, rather deeply pectinated. Pectus with an oblique yellow streak on each side. Wings lurid hyaline; hind borders with a black margin which widens at the tip of the fore wings; terminal veinlets of the discal areolet forming a very obtuse angle; discal fold very distinct along the whole length of the discal areolet and from thence to the tip of the wing; black of the hind border a little produced inward at the tip of the fourth inferior veinlet and of the submedian vein. Abdomen linear: first segment with two luteous dots on the hind border. Legs rather stout; spurs of the hind tibiæ moderately long. Coxæ, especially the fore pair, white on one side. Length of the body 10 lines; of the wings 25 lines.

a. Guatemala. From Mr. Stevens' collection.

27. GLAUCOPIS VARIA.

Nigro-fusca; caput cyaneo maculatum; antennæ luteæ basi nigricantes; abdomen e guttis purpureis bivittatum, basi flavo bifasciatum, subtus albo maculatum; alæ flavescente-hyalinæ, apicibus marginibusque posticis nigris, his luteo strigatis; femora purpureo notata; tarsi lutei.

Brownish black. Head with a blue spot on the vertex. Antennæ luteous, blackish above towards the base. Wings yellowish hyaline; veins luteous; tips and hind borders black; a blue dot on the base of each fore wing; a broad short luteous black-bordered stripe along the hind border from the base of each fore wing. Abdomen with a row of purple dots along each side; at the base two interrupted yellow bands and behind them a white dot on each side; under side with three white spots on each side. Femora with purple marks; tarsi luteous. Length of the body $7\frac{1}{2}$ lines; of the wings 20 lines.

Var. β. Abdomen beneath with a white band instead of the two spots nearest the base.

a, b. Paræ. From Mr. Bates' collection.

28. GLAUCOPIS PORPHYRIUS.

Lutea; antennæ pectinatæ; thorax nigro sexvittatus, antice nigro unifasciatus purpureoque biguttatus; abdomen nigrum, e guttis purpureis trivittatum, luteo fasciatum, subtus album; alæ flavescente-hyalinæ, anticæ margine postico luteo vittato.

Sphinx adscita Porphyria, *Cram. Pap. Exot.* iv. 227, pl. 397, f. E.
Centronia Porphyria, *Hübner. Verz. Schmett.* 122, 1325.

Surinam.

Luteous. Proboscis black. Palpi curved, rather long; third joint very minute. Antennæ moderately pectinated beneath to five-sixths of the length. Thorax with a black band in front, on which are two purple dots, and with six black stripes, the two middle stripes much interrupted and forming four spots on the disk; a purple dot on each hinder spot. Wings yellowish hyaline; veins luteous; transverse veinlets of the discal areolet forming a hardly obtuse angle; tips and hind borders black; a purple dot on the base of each fore wing; a broad short luteous black-bordered stripe along

the hind border of each fore wing from the base. Abdomen black, with a row of purple dots along each side; first segment with a large transverse yellow spot; fore borders of the second, third and fourth segments with luteous bands which are widened to the hind borders on each side; under side white.

29. GLAUCOPIS VESPARIA.

Testacea; thorax fusco varius; alæ flavido-hyalinæ, venis et marginibus tenuissimo fuscis; abdominis latera cæruleo punctata.
Long. alar. 16 lin.

Glaucopis vesparia, Perty, *Delect. Anim. Artic. Bras.* 157, pl. 31, f. 9.
Amazon River.

Group 9. PÆCILOSOMA.

Corpus validum, convexum, cylindricum, ex parte metallicum. Palpi sat longi; articulus 2us linearis, apice conicus, 2o brevior. Antennæ graciles, usque ad apices subpectinatæ. Alæ hyalinæ, basi metallicæ; anticæ apice nigræ; plica discalis distincta. Pedes validiusculi; tibiæ posticæ calcaribus quatuor minimis.

Pæciolosoma, Hübn. *Verz. Schmett.* 126.

Body stout, convex, cylindrical, partly metallic. Palpi rather long, third joint linear, conical at the tip, shorter than the second. Antennæ slender, minutely pectinated to the tips. Wings hyaline, metallic at the base; fore wings with black tips; discal fold distinct. Legs moderately stout; median and apical spurs of the hind tibiæ very small.

30. GLAUCOPIS FLAVITARSIS.

Nigra, sericea, testaceo varia; thorax viridi sexmaculatus; alæ sublurido-hyalinæ, margine postico nigro; abdomen e maculis cyaneis bivittatum.

Body black, sericeous. Head mostly testaceous, green on the vertex. Thorax with two green marks in front, with two on the disk, and with two behind; also, with two connected testaceous bands forming two ovals in front, with two testaceous spots on the disk, and with two testaceous stripes on each side. Wings with a very slight lurid tinge; veins and tips black; part of the hind border with a very narrow black margin. Each abdominal segment with

a blue spot on each side of the disk, and with a testaceous band on the fore border; under side testaceous, excepting the base and a band near the tip. Femora and tibiæ with testaceous stripes beneath; posterior tarsi testaceous; fore tarsi brown. Length of the body 6 lines; of the wings 18 lines.

a—c. Venezuela. From Mr. Dyson's collection.

31. GLAUCOPIS INTENSA.

Atræ, cyaneo varia; thorax maculis duabus aurantiacis; alæ lurida-hyalinæ, basi apiceque nigræ; abdomen basi maculis duabus rufis vittisque duabus e maculis cyaneis, subtus album maculis duabus subapicalibus aurantiacis.

Very deep black. Head blue above. Thorax with four blue spots in front, and with three blue stripes; an orange spot on each shoulder. Wings hyaline, with a lurid tinge, black at the tips. Fore wings black at the base, and hind wings with a black spot on the hind border. Abdomen with a row of bright blue spots along each side, and with a bright red spot on each side at the base; under side silky white on the disk towards the base, and with a large orange spot on each side towards the tip. Femora and tibiæ mostly blue; fore coxæ white on one side. Length of the body 4 lines; of the wings 13 lines.

a. Honduras. From Mr. Dyson's collection.

32. GLAUCOPIS SUBFLAMMA.

Nigra; caput cyaneum nigro fasciatum; antennæ subpectinatae apice albæ; thorax cyaneo varius; pectus rufum; abdomen cyanescens; alæ purpureo-limpidæ, longæ, nigro marginatæ; pedes rufo varii.

Black. Head bright blue, with a deep black band in front of the antennæ. Proboscis piceous. Palpi moderately long, nearly straight; third joint less than half the length of the second. Antennæ minutely pectinated, white above towards the tips. Thorax with whitish blue spots in front; scutellum bright blue. Pectus bright red. Wings long, moderately broad, limpid with purple reflections, with black borders, which are rather broad, especially at the tips of the fore wings; transverse veinlets at the tip of the discal areolet forming an obtuse angle; discal fold distinct along most of the length of the discal areolet, beyond which it is united to the first

inferior veinlet. Abdomen with a bluish tinge. Femora towards the base and coxæ red; hind tibiæ and hind tarsi red above. Length of the body 7 lines; of the wings 20 lines.

a. Brazil. From Mr. Stevens' collection.

33. GLAUCOPIS ACROXANTHA.

Cerulea; antennæ nigrae, apice flavæ; alæ limpidæ, nigro marginatæ, anticæ fascia nigra. Long. alar. 21 lin.

Glaucopis acroxantha, Perty, *Delect. Anim. Artic. Bras.* 156, pl. 31, f. 4.

Brazil.

Var.? *Mas. Atra, cyaneo viridique varia; antennæ sat longe pectinatæ, albo late fasciatæ; alæ limpidæ nigro marginatæ, anticæ basi aureo-virides gutta alba; abdomen viridi alboque guttatum; pedes cyaneo-virides, femoribus apice subtus albis, tarsis nigris.*

Male. Deep black. Head and palpi bluish green; the latter moderately long, their third joint very small. Proboscis black. Antennæ moderately pectinated, black for more than half the length from the base, white beyond for near one-third of the length, black at the tips. Prothorax green, varied with purple. Mesothorax with a dorsal stripe of the same colour, which also prevails on the pectus. Wings limpid, with black borders. Fore wings golden green with a white dot at the base; transverse veinlets forming a very obtuse angle at the tip of the discal areolet where there is a slender slightly curved band extending across the wing; discal fold hardly visible in the discal areolet, but distinct from thence to the tip of the wing. Abdomen nearly linear, green varied with purple, and with three rows of brighter green dots along half the length from the base; some white dots on each side and beneath where the lobe at the base has a large white spot on each side. Legs rather slender, bluish green; spurs of the hind tibiæ small; fore coxæ white above; tips of the femora white beneath; tarsi black. Length of the body 8 lines; of the wings 20 lines.

a. Brazil. From Mr. Stevens' collection.

34. GLAUCOPIS TORRIDA.

Lutea; caput nigro fasciatum; antennæ nigrae, subpectinatae, apice albæ; thorax nigro bivittatus; pectoris latera strigis obliquis nigris; abdomen nigro cyaneoque fasciatum; alæ luteo-hyalinae, nigro marginatae, postice luteo strigatae; anticae nigro fasciatae.

Fem. Luteous. Head with a black band between the antennæ. Proboscis tawny. Palpi rather long; third joint nearly half the length of the second. Antennæ black, minutely pectinated, white above towards the tips. Thorax with two broad black stripes which are united behind and slightly forked in front. Pectus with oblique black stripes on each side. Wings luteous hyaline, with black margins at the tips and along the hind borders, and in the fore wings along part of the fore borders; these margins are widened at the tips of the wings, and at the middle of each border of the hind wings; a broad short luteous stripe on the hind border of each wing from the base; a black band on each fore wing by the tip of the discal areolet, interrupted on the submedian vein; discal fold hardly apparent on the discal areolet, but distinct beyond it. Abdomen subfusiform; fore borders of the segments above and nearly the whole of the apical segments with black bands which are intersected by blue bands. Legs rather slender; spurs of the tibiae small. Length of the body $5\frac{1}{2}$ lines; of the wings 16 lines.

a. Tapayos, Brazil. From Mr. Bates' collection.

35. GLAUCOPIS USTRINA.

Atra; proboscis basi flava; thorax maculis duabus anticis magnis duabusque posticis parvis flavis; alæ limpidæ, nigro marginatae, areola discali nigro terminata; abdomen vittis tribus macularibus cyaneis quatuorque macularibus flavis, nec non vitta maculari ventrali albida; tibiæ tarsique coccinea, illa basi nigrae.

Isanthrene Ustrina, Hübn. *Samml. Exot. Schm.* f. 493, 494.
Gymnelia Ustrina, MSS.

a. Brazil. From Mr. Mornay's collection.

b, c. Brazil. From M. Becker's collection.

36. GLAUCOPIS CHRYSIS.

Nigra; caput cyaneum; thorax maculis quatuor anticis cyaneis, disco aurantiaco; abdomen maculis dorsalibus et apice lateralibus cyaneis, subtus albo bimaculatum et unifasciatum; alæ limpidæ nigro marginatæ.

Pæcilosoma Chrysis, *Hübner. Verz. Schmett.* 126, 1360; *Samml. Exot. Schmett.* 8, 106, f. 211, 212.

a. Ega, Amazon River. From Mr. Bates' collection.

37. GLAUCOPIS PULCHRA.

Pæcilosoma pulchra, *Hübner. Verz. Schmett.* 126, 1361.

38. GLAUCOPIS PHERES.

Sphinx adscita Pheres, *Cramer. Pap. Exot.* iv. 183, pl. 382, f. C. *Autochloris Pheres*, *Hübner. Verz. Schmett.* 125, 1354.

Surinam.

Var.? *Atra; caput album, vertice aureo-viridi; thorax aureo-viridi bivittatus; abdomen e maculis aureo-viridibus trivittatum, maculis albis bivittatum; alæ limpidæ nigro marginatæ, anticæ nigro fasciatæ; pedes albo varii.*

Deep black. Head white, vertex, four stripes on the thorax and scutellum golden green. Wings limpid; veins, borders, tips and apical side of the discal areolet black. Abdomen with three rows of golden-green spots, and on each side with a row of white spots. Femora green; fore coxæ white on one side; posterior tarsi mostly white. Length of the body $4\frac{1}{2}$ —5 lines; of the wings 13—14 lines.

a—d. Paræ. From Mr. Bates' collection.

e, f. Rio Janeiro. From Mr. Stevens' collection.

39. GLAUCOPIS ECHEMUS.

Cyanea; *caput fulvum*; *alæ limpidæ, nigro marginatæ, maculaque apud areolæ discalis apicem nigra.*

Sphinx adscita Echemus, *Cram. Pap. Exot.* iv. 148, pl. 367, f. B.
Chrostosoma Echemus, *Hübner Verz. Schmett.* 126, 1362.

Surinam.

40. GLAUCOPIS MULTICINCTA.

Mas. Nigro-fusca, cyaneo-squamosa, albo-hirta; *antennæ nigre pectinatæ*; *thorax albo coccineoque fasciatus et vittatus*; *abdomen e maculis coccineis bivittatum, segmentis albo fasciatis, apice subtilis coccineo fasciculato*; *alæ limpidæ sat latæ, anticæ nigro marginatæ et fasciatæ.*

Male. Dark brown, linear, cylindrical, partly covered with blue scales. Head with some white hairs above and thickly clothed with white hairs beneath. Palpi white beneath, straight, rather short; third joint very small. Antennæ black, moderately deeply pectinated. Thorax with two white bands in front, with four curved white stripes on the disk; also with two crimson spots in front, and with a crimson stripe on each side by the wing; a few scattered blue hairs. Pectus with white hairs. Wings limpid, rather broad. Fore wings with black tips and borders, on the latter some blue scales; a black band across the end of the discal areolet where the veinlets hardly form an angle; no trace of the discal fold. Borders of the hind wings mostly black. Abdomen with two crimson spots at the base and with a row of crimson spots along each side; a slender white band on the hind border of each segment; under side white, with short crimson and black bands along the apical half, and with a tuft of crimson hairs at the tip. Legs brown, mostly clothed with white; coxæ blue beneath; fore tibiæ with long spines beneath; middle and apical spurs of the hind tibiæ rather long. Length of the body 6 lines; of the wings 16 lines.

a. St. Domingo. From Mr. Cuming's collection.

41. GLAUCOPIS ORNATULA.

Fœm. Atræ, linearis, cylindrica; *antennæ subpectinatæ*; *thorax fuscus, luteo interrupte fasciatus, cyaneo bimaculatus*; *abdominis latera anticæ luteo notata posticæ cyaneo maculata*; *alæ angustæ limpidæ nigro late marginatæ, anticæ nigro fasciatæ.*

Fem. Deep black, linear, cylindrical. Proboscis testaceous. Palpi long, slightly curved; third joint small, conical, not more than one-fourth of the length of the second. Antennæ minutely pectinated. Thorax brown; front with a short luteous band on each side, and with two blue spots in the middle; scutellum and sides of the pectus with luteous hairs. Wings narrow, limpid, black at the base and with broad black borders which at the tips occupy one-fourth of the length of the wing; a broad black band across the middle; discal fold hardly apparent in the discal areolet, but very distinct beyond it. Hind wings limpid on only a small part of the disk. Sides of the abdomen with some luteous marks towards the base and with some blue spots towards the tip. Legs slender; spurs of the hind tibiæ rather small. Length of the body $4\frac{1}{2}$ lines; of the wings 15 lines.

a—c. Paræ. From Mr. Bates' collection.

Group 10. LAGARIA.

Corpus lineare. Palpi verticem attingentes; articulus 3us gracilis, 2i dimidio longior. Antennæ subpectinatæ. Alæ amplæ, hyalinæ, nigro marginatæ; plica discalis apicem versus distincta. Pedes graciles; tibiæ posticæ calcaribus quatuor minutis.

Body linear. Palpi rising to the vertex; third joint slender, more than half the length of the second. Antennæ minutely pectinated. Wings ample, hyaline, with black borders; discal fold distinct beyond the discal areolet. Legs slender; hind tibiæ with four minute spurs.

42. GLAUCOPIS ERYTHARCHOS

Fusca; antennæ subpectinatæ; thorax rufo bivittatus; pectus album; abdomen e maculis albis trivittatum, rufo quadrimaculatum; alæ hyalinæ, fusco submarginatæ, basi rufæ; femora tibiæque apice alba.

Brown. Second joint of the palpi slender, pointed. Antennæ slightly pectinated to the tips. Thorax with a red stripe on each side. Breast white. Wings limpid, red at the base; fore wings brown at the base in front; hind border slightly and irregularly bordered with brown which is broad at the tips of the fore wings. Abdomen with two white marks at the base and with three rows of white dots, adorned with a red spot on each side at the base and

another pair about the middle; under side with two rows of white dots. Femora and tibiæ with white tips. Length of the body 8 lines; of the wings 24 lines.

a. Brazil. Presented by H. Low, jun., Esq.

Group 11. ERRUCA.

Corpus lineare, cylindricum, sat gracile. Palpi verticem non attingentes; articulus 3us gracilis, 2i dimidio longior. Antennæ subpectinatæ. Alæ mediocres, limpidæ; anticæ apice nigræ; plica discalis distincta. Pedes graciles; tibiæ posticæ calcaribus quatuor parvis.

Body linear, cylindrical, rather slender. Palpi not rising to the vertex; third joint slender, more than half the length of the second. Antennæ minutely pectinated. Wings moderate, limpid; fore wings with black tips; discal fold distinct. Legs slender; hind tibiæ with four small spurs.

43. GLAUCOPIS DEYROLII.

Atra, gracilis, cylindrica; caput antice album; antennæ graciles, apice albidæ; thorax albo biguttatus; abdomen e guttis albis bivittatum et apice trivittatum; alæ hyalinæ subluridæ, nigro submarginatæ, anticæ basi luteo marginatæ; pedes nigro-fusci, albo guttati.

Gymnelia Deyrolii, MSS.

Deep black, slender, cylindrical. Clypeus white in front and on each side; a white dot on each side behind the antennæ. Antennæ slender, whitish above towards the tips. Thorax with a white dot on each side in front. Wings with a slight lurid tinge; black margin slender, broad at the tips of the fore wings, and not extending along their fore border. Fore wings with a luteous streak along the fore border and along the basal half of the hind border. Abdomen with two lateral rows of white dots along the whole length, and with a dorsal row towards the tip; under side with two rows of white dots. Legs blackish brown, with a white dot at the tip of each femur and of each tibia. Length of the body 7 lines; of the wings 19 lines.

a, b. Rio Grande. From M. Becker's collection.

Group 12. ILIPA.

Mas. Corpus longi-fusiforme. Palpi sat longi, verticem superantes; articulus 3us gracilis, 2i dimidio vix brevior. Antennæ subpectinatæ. Abdomen thorace duplo longius. Alæ sat latæ, latitudine mediocres, limpidæ, nigro marginatæ; anticæ nigro subfasciatæ; plica discalis distincta. Pedes graciles; tibiæ posticæ mediocriter quadricalcaratæ.

Male. Body elongate-fusiform. Palpi rather long, extending above the vertex; third joint slender, full half the length of the second. Antennæ shortly pectinated. Abdomen about twice the length of the thorax. Wings rather long, moderately broad, limpid, with black borders; fore wings with a black mark on the tip of the discal areolet; discal fold distinct. Legs slender; hind tibiæ with four spurs of moderate size.

44. GLAUCOPIS BRACONOIDES.

Mas. Nigro-fusca; caput albo guttatum; antennæ nigre plumosæ; abdomen luteum, guttis dorsalibus fuscis, apice fuscum; alæ limpidæ nigro-fusco marginatæ, anticæ fusco subfasciatæ.

Male. Blackish brown. Head with white dots above. Palpi straight, rather long; third joint about half the length of the second. Antennæ black, moderately plumose to the tips. Wings limpid, with blackish brown tips and borders. Fore wings broad, with two white dots on each at the base; their tips brown for nearly one-fourth of the length; a crescent-shaped brown mark across the tip of the discal areolet; discal fold apparent for full half the length of the discal areolet, united for a long space with the first inferior veinlet; the brown on the hind border extending as usual slightly inward opposite the extremity of the discal areolet. Abdomen luteous, slightly tapering towards the tip which is brown; a row of brown dots along the back; appendages testaceous. Legs rather long and slender; middle and apical spurs of the hind tibiæ moderately long. Length of the body 6 lines; of the wings 19 lines.

a. Honduras. From Mr. Dyson's collection.

45. GLAUCOPIS TENGYRA.

Mas. *Nigra; caput ferrugineum, subtus testaceum; palpi fusci, basi testacei; thoracis discus albo unimaculatus; abdomen luteum, elongatum; alæ longæ, limpidæ, marginibus angustis nigro-fuscis.*

Glaucopis Tengyra, MSS.

Male. Black. Head ferruginous, testaceous beneath. Proboscis ferruginous. Palpi brown, curved, rather long, testaceous at the base; third joint less than half the length of the second. Antennæ long, a little shorter than the body, pectinated to the tips. Thorax with a white spot in the disk. Wings long, limpid, with blackish brown borders, which are very narrow except at the tips of the fore wings; transverse veinlets at the tip of the discal areolet forming an acute angle; discal fold apparent in part of the discal areolet, connected with the first inferior vein along most of the length of the latter. Abdomen pale luteous, long, slightly tapering towards the tip; appendages testaceous, long, curved. Legs brown, slender; hind tibiæ rather long, their spurs of moderate size. Length of the body 5—6 lines; of the wings 17—19 lines.

a. Brazil. From M. Becker's collection.

46. GLAUCOPIS LATILINEA.

Nigra; antennæ late pectinatæ; thorax luteo bimaculatus; abdomen luteum, apicem versus fuscum guttisq[ue] cyaneis bivittatum; alæ limpidæ nigro marginatæ et fasciatæ, anticæ latæ.

Black. Palpi long, hardly curved; third joint about one-third of the length of the second. Antennæ deeply pectinated to the tips. Thorax with a luteous spot on each side in front. Pectus powdered with white. Wings limpid, with broad black borders; tips black for one-fourth of the length. Fore wings broad, with a broad transverse black band by the end of the discal areolet; a blue dot at the base; discal fold not apparent in the discal areolet, but very distinct beyond it. Hind wings with a black band which is nearly interrupted in the middle. Abdomen luteous, powdered with white, rather short, nearly linear, brown with blue dots on each side for full one-third of the length from the tip. Legs rather stout; fore tibiæ dentate beneath; middle and apical spurs of the hind tibiæ very small. Length of the body 5 lines; of the wings 16 lines.

a. Brazil. From Mr. Bates' collection.

Group 13. COSMOSOMA.

Corpus breviusculum, sat gracile, sublineare. Palpi valide; articulus 3us parvus, conicus, 2o plus duplo brevior. Antennæ maris late pectinatæ, fœminæ subpectinatæ. Alæ hyalinæ; plica discalis optime determinata. Pedes validiusculi; tibiæ posticæ calcaribus quatuor parvis.

Cosmosoma, Hüb. Harris, *Descr. Cat. N. Amer. Sphing.* 37.
Ægeria p., Say.

Body rather short and slender, nearly linear. Palpi stout; third joint small, conical, less than half the length of the second. Antennæ deeply pectinated to the tips in the male, slightly so in the female. Wings mostly hyaline; discal fold very distinct, intersecting part of the discal areolet, and separate from the first inferior veinlet. Legs moderately stout; median and apical spurs of the hind tibiæ small.

The orange spots between the third and fourth inferior veins of the wings of the male are wanting in the female, and the two blue stripes of the abdomen are interrupted in the latter sex.

47. GLAUCOPIS OMPHALE.

Læte rubra; caput cyaneum; antennæ nigræ apice albæ; thorax sæpissime nigro vittatus; abdominis vitta dorsalis et apex nigræ cyaneo guttatæ; alæ limpidæ, nigro marginatæ.

Cosmosoma Omphale, Hüb. *Samml. Exot. Schmett.* ii. *Lép.* ii. *Sphinges*, i. *Pap.* iii. *Glauc. D. Hyalinæ*, 3, f. 1—4.

Ægeria Omphale, Say, *American Entomology*, ii. pl. 19, lower figure.

a—e. Florida. Presented by E. Doubleday, Esq.

48. GLAUCOPIS TEUTHRAS.

Atra; caput antice cyaneum; thorax coccineus, cyaneo biguttatus; abdomen e maculis cyaneis trivittatum, basi coccineum; alæ limpidæ nigro submarginatæ; pedes testacei.

Hæmocharis Teuthras, MSS.

Deep black. Head bright blue in front. Thorax bright crimson, which hue extends over the base of the wings and along part of the borders, and forms a spot at the tip of the discal areolet in the fore wings. A blue dot on each shoulder. Wings limpid; a black stripe extending along the borders which are not occupied by the red hue, and very broad at the tips of the fore wings. Abdomen crimson at the base, with three rows of blue spots; the middle row slight. Legs testaceous. Length of the body 6—7 lines; of the wings 18—20 lines.

Var. β. Smaller. Red spot on the fore wings much narrower.

a. Venezuela. From M. Becker's collection.

b, c. Venezuela. From Mr. Dyson's collection.

d, e. Brazil. From Mr. Mornay's collection.

49. GLAUCOPIS IMPAR.

Nigra; caput antice cyaneum; thorax luteus, fascia antica interrupta cyanea; abdomen basi luteum cyaneo bimaculatum, apice e maculis cyaneis trivittatum; alæ limpidæ nigro marginatæ, anticæ nigro subfasciatæ; pedes testacei.

Black. Head bright blue in front. Thorax luteous, which hue slightly extends over the basal part of the borders of the wings; an interrupted blue band in front of the thorax. Wings limpid; a black stripe extending along the borders, and very broad at the tips of the fore wings; a large slightly curved black spot at the tip of the discal areolet. Abdomen luteous at the base, near which are two dorsal blue spots; three rows of blue spots at the tip. Legs dark testaceous. Length of the body 7 lines; of the wings 20 lines.

a, b. Mexico. From Mr. Argent's collection.

50. GLAUCOPIS TYRRHENE.

Aurantiaca; caput cyaneum; antennæ nigrae; abdomen vittis duabus (in fœm. interruptis) apicequæ cyaneis; alæ limpidæ, basi aurantiacæ apice ferrugineæ, maris anticæ macula discali aurantiaca.

Euchromia Tyrrhene, Hübn. Samml. Exot. Schmett. 23, 242, f. 483, 484.

a—c. Jamaica. From Mr. Gosse's collection.

f, g. ———? Presented by E. Doubleday, Esq.

h, i. ———? From Mr. Argent's collection.

51. GLAUCOPIS TELEPHUS.

Atra; caput antice cyaneum; thorax rufus; abdomen e maculis cyaneis trivittatum, basi rufum; alæ limpidæ, nigro marginatæ; pedes testacei.

Hæmacharis Telephus, MSS.

Deep black. Head bright blue in front. Thorax bright red, which hue extends over the base of the wings and along part of the borders, but forms no spot in the discal areolet. Wings limpid; a black stripe extending along the borders which are not occupied by the red hue, and very broad at the tips of the fore wings; a very small black mark at the tip of the discal areolet. Abdomen red at the base, with three rows of blue spots; the middle row slight. Legs testaceous. Length of the body $6\frac{1}{2}$ lines; of the wings 22 lines.

a. Venezuela. From M. Becker's collection.

b. Venezuela. From Mr. Dyson's collection.

c. ———?

52. GLAUCOPIS REMOTA.

Nigra; caput viride; antennæ pectinatæ apice albidæ; thorax viridi bivittatus, ochraceo-hirtus; abdomen e maculis viridibus bivittatum; alæ limpidæ nigro marginatæ, anticæ nigro subfasciatæ et unimaculatæ.

Black. Head green. Antennæ less deeply pectinated than in *G. Tyrrhene*, whitish above towards the tips. Thorax with two green stripes, clothed with orange hairs in front and on each side and with dark orange or brown hairs on the disk. Scutellum green. Wings limpid, black along the borders, and for near one-fourth of the length at the tips, with a more or less distinct black mark across the tip of the discal areolet, and in the male with a large black spot whose disk is sometimes orange between the second and third inferior veins. Abdomen with two rows of green spots above and two beneath. Legs mostly covered with green scales. Length of the body 4 lines; of the wings 14 lines.

a. Brazil. Presented by J. P. G. Smith, Esq.

b. Brazil. From M. Becker's collection.

c, d. Venezuela. From Mr. Dyson's collection.

e. Pernambuco. Presented by J. P. G. Smith, Esq.

53. GLAUCOPIS CENTRALIS.

Nigra, gracilis, sublinearis, cyaneo varia; antennæ pectinatæ; thoracis latera lutea; abdomen e maculis cyaneis bivittatum; alæ limpidæ basi luteæ apice et postice fusco marginatæ, anticæ luteo fasciatæ.

Black, slender, nearly linear. Head mostly blue. Palpi slender, rather long, slightly curved; third joint nearly half the length of the second. Antennæ moderately pectuated. Thorax mostly blue in front and on the scutellum and beneath, luteous on each side. Wings limpid, brown along the hind borders and on one-fourth of the length from the tips, luteous towards the base as are also the veins. Fore wings with the usual luteous band which is dilated and luteous behind the discal areolet; discal fold not apparent in the discal areolet but very distinct beyond it. Hind border of the hind wings broader than that of the fore wings. Abdomen with a row of blue spots on each side. Fore tibiæ hardly dentated beneath; middle and apical spurs of hind tibiæ very small. Length of the body $4\frac{1}{2}$ lines; of the wings 13 lines.

a. Rio Janeiro. From Mr. Johnson's collection.

54. GLAUCOPIS FESTIVA.

Fœm. Cyanea aut viridis, linearis, sat brevis; proboscis, palpi et antennæ nigra; antennæ subpectinatæ, apice albæ; thorax ferrugineus, luteo bimaculatus et bivittatus; abdomen nigrum, e maculis cyaneis bivittatum; alæ limpidæ testaceo submarginatæ, anticæ latæ nigro interrupte fasciatæ.

Fem. Bright metallic blue or green, according to the reflection, linear, rather short. Proboscis, palpi and antennæ black. Palpi nearly straight, rather long; third joint moderately long, about half the length of the second. Antennæ minutely pectinated, white above, towards the tips. Thorax ferruginous, with two luteous spots in front, and with a luteous stripe on each side. Pectus partly ferruginous. Wings limpid. Fore wings broad, testaceous at the base and along most of the fore border and partly so along half of the hind border, black at the tips for one-fourth of the length and with black hind borders; a black band across the middle, interrupted on part of the median vein and of the fourth inferior veinlet; veins black, testaceous at the base; discal fold not apparent on the discal areolet but distinct beyond it. Hind wings with the base, the fore border and the veins testaceous; tips and hind borders black.

Abdomen black, with two rows of blue or green spots above and beneath. Legs black; slender; tooth of the fore tibiæ small; middle and apical spurs of the hind tibiæ very small. Length of the body 4 lines; of the wings 12 lines.

a. Honduras. From Mr. Dyson's collection.

Group 12. HYELA.

Corpus lineare, longiusculum, subangustatum. Palpi verticem attingentes, subarcuati; articulus 3us parvus, 2o triplo brevior. Antennæ pectinatæ. Abdomen apice fasciculatum. Alæ angustæ, limpidæ, nigro marginatæ; plica discalis distincta.

Body linear, moderately long and narrow. Palpi rising to the vertex, slightly curved; third joint small, hardly one-third of the length of the second. Antennæ moderately pectinated. Abdomen tufted at the tip. Wings narrow, limpid, with black borders; fore wings about twice the length of the hind wings; discal fold distinct.

55. GLAUCOPIS SANGUINEA.

Nigra; caput cyaneum; thorax aureo-viridi bivittatus, lateribus rufo-hirtis, pectore rufescente; abdomen viridi trivittatum, rufo bivittatum, basi subtus apiceque rufum; alæ limpide nigro marginatæ, anticæ nigro fasciatæ; pedes albo varii.

Black. Head blue. Thorax with a golden green stripe on each side where it is mostly covered with bright red hairs. Pectus reddish. Wings limpid; borders and a mark across the tip of the discal areolet black. Abdomen with three bright green stripes, and with two bright red stripes; tip bright red; a large red spot with a white hind border at the base of the under side. Fore coxæ white on one side; fore femora and middle tarsi whitish beneath; hind tarsi white. Length of the body $5\frac{1}{2}$ lines; of the wings 14 lines.

a. ——— ?

Group 13. HYSIA.

Corpus longi-fusiforme. Palpi validi, subarcuati; articulus 3us minimus, 2o quadruplo brevior. Antennæ mediocriter pectinatæ. Abdomen apice subfasciculatum. Alæ nigræ disco limpidæ. Pedes validiusculi; tibiæ posticæ calcaribus quatuor abbreviatis.

Male. Body elongate-fusiform, black, adorned with other colours. Palpi stout, slightly curved, hardly rising to the vertex; third joint very small, less than one-fourth of the length of the second. Antennæ moderately pectinated. Abdomen slightly tufted at the tip. Wings limpid, with broad black borders; hind wings almost wholly black. Legs moderately stout; hind tibiæ with four short spurs.

56. GLAUCOPIS ASTYOCHÆ.

Nigra, albo varia; thorax fulvo-testaceus; abdomen vittis duabus lateralibus macularibus unaque ventrali integra albis; alæ anticæ disco hyalino apicem versus indentato; posticæ macula parva oblonga limpida.

Euchromia Astyoche (*Sphinx papilionoides*, *Glaucopis excelsa*), Geyer, *Zutr. Samml. Exot. Schmett.* 1832. *Viertes Hundert.* 41, 397, f. 793, 794.

Surinam.

a. Parâ. From Mr. Bates' collection.

57. GLAUCOPIS TEMENUS.

Nigra, capite thoraceque fulvis; alæ limpidæ, nigro marginatæ.

Sphinx adscita Temenus, Cram. *Pap. Exot.* iv. 148, pl. 367, f. D. *Pseudomya Temenus*, Hübn. *Verz. Schmett.* 124, 1346.

Surinam.

58. GLAUCOPIS MELALEUCA.

Nigra; caput albo-hirtum; antennæ graciles subtus serratæ et pilosæ; thorax albo sexmaculatus; pectus albicans; abdomen albo trivittatum; alæ anticæ limpidæ nigro marginatæ, posticæ nigre striga limpida maculaque alba.

Black. Head with white hairs in front and beneath. Palpi rather long; third joint very small. Antennæ slender; serrated and pilose beneath. Thorax with six white spots. Pectus whitish. Fore wings limpid, with black borders which are broadest behind; a white dot on each at the base; tips black for more than one-fourth of the length; discal fold very distinct for more than half the length of the discal areolet. Hind wings black, with a limpid stripe in the disk, in front of which there is an oblong white spot. Abdomen with three white stripes; under side with one white stripe which

is interrupted near the tip. Legs with whitish tomentum; fore tibiæ dentated beneath; spurs of the hind tibiæ small. Length of the body 4 lines; of the wings 12 lines.

a. Parà. From Mr. Bates' collection.

Group 14. MARISSA.

Corpus breve. Palpi caput superantes; articulus 3us longus, linearis, 2o brevior. Antennæ maris latissime pectinatæ. Alæ amplæ, limpidæ, nigro marginatæ; plica discalis distincta. Pedes graciles; tibiæ posticæ calcaribus quatuor minutis.

Body short. Palpi rising above the head; third joint long, linear, shorter than the second. Antennæ of the male very broadly pectinated. Wings ample, limpid, with black borders; fore wings about twice the length of the hind wings, with the discal fold distinct. Legs slender; hind tibiæ with four minute spurs.

59. GLAUCOPIS COLUMBINA.

Læte rubra; antennæ nigræ; thoracis dorsum nigrum albo lineatum; abdomen vitta dorsali nigro lineis transversis albis; alæ limpidæ, nigro marginatæ, anticæ macula apud areolæ discalis apicem rubra.

Zygæna Columbina, *Fabr. Ent. Syst.* iii. 403, 57.

Ennomia Columbina, *Hübner. Verz. Schmett.* 125, 1355; *Samml.*

Exot. Schmett. 8, 5, f. 9, 10.

a—c. Jamaica. From Mr. Gosse's collection.

d—f. Honduras. From Mr. Miller's collection.

60. GLAUCOPIS EONE.

Atra, subtus albo varia; thorax maculis quatuor anticis cyaneis vittisque duabus lateralibus albis; abdomen vittis tribus macularibus albis maculisque duabus magnis basalibus rufis, apice cyaneo biguttatum; alæ limpidæ nigro marginatæ, anticæ basi cyaneæ, fascia discali nigra.

Agerocha Eone, *Geyer, Zutr. Samml. Exot. Schmett.* f. 417, 418.

a. Ega, Amazon River. From Mr. Bates' collection.

b. Santarem, Brazil. From Mr. Bates' collection.

c. ——— ?

61. GLAUCOPIS CRUENTA.

Nigra, tegulis et abdominis basi sanguineis; alæ limpida coccineo marginatæ, anticæ apice obscuriores; abdomen postice guttis dorsalibus albis. Long. alar. 14 lin.

Glaucopis cruenta, Perty, *Delect. Anim. Artic. Bras.* 157, pl. 31, f. 8.

Amazon River.

Group 15. PHACUSA.

Corpus longi-fusiforme. Palpi verticem attingentes; articulus 3us 2i dimidio vix brevior. Antennæ subpectinatæ. Alæ longæ, hyalinæ, apice nigræ; anticæ nigro fasciatæ. Pedes validiusculi; tibie posticæ mediocriter quadricaratae.

Body elongate, subfusiform. Palpi extending to the vertex; third joint nearly half the length of the second. Antennæ minutely pectinated. Wings long, hyaline, with black tips; fore wings with a broad black band. Legs moderately stout; hind tibie with four spurs of moderate size.

62. GLAUCOPIS VARIPES.

Nigro-fusca; caput subtus, proboscis, et palpi basi testacea; antennæ maris subpectinatæ, fœm. vix pectinatæ; thorax cyaneo quadrimaculatus, testaceo bivittatus; abdomen rufum, maris e guttis cyaneis bivittatum, fœm. albo varium; alæ luteo-hyalinæ apice nigro-fuscae, anticæ nigro-fusco fasciatæ; pedes testacei, fusco varii.

Blackish brown. Head testaceous beneath. Proboscis testaceous. Palpi testaceous towards the base. Antennæ black, minutely pectinated in the male, hardly pectinated in the female. Thorax with four blue spots in front and with a testaceous stripe on each side. Wings luteous-hyaline. Fore wings in the middle with a broad dark brown band, which in the male is interrupted and contains a blue dot in front. Tips of the four wings and part of the hind border of the hind wings dark brown. Abdomen of the male bright red, with a row of blue dots along each side; first segment brown in the middle, luteous on each side; fifth, sixth and seventh segments brown; disk of the under side testaceous. Abdomen of the female paler red with two white dots above at the base; tip above

brown with a white stripe on each side; under side white, testaceous at the tip. Legs testaceous, moderately stout; posterior femora and tibiæ mostly brown; hind tarsi brown at the base; fore tibiæ partly brown; a blue mark on each tibia of the male. Length of the body 3—4½ lines; of the wings 12—16 lines.

a—c. Parà. From Mr. Bates' collection.

63. GLAUCOPIS ALBIVENTRIS.

Mas. Nigra, gracilis, albo varia; antennæ sat late pectinatæ; abdomen rufum, subtus album, apice nigrum; alæ sublimpidæ apice nigro-fuscæ, anticæ nigro-fusco fasciatæ; pedes testacei, tibiis anticis et posticis tarsisque posticis nigris.

Male. Black, slender. Head white in front. Palpi rather long, slightly curved; third joint very minute. Antennæ setaceous, rather deeply pectinated nearly to the tips. Thorax with some white marks in front. Pectus mostly white. Wings moderately long and broad, nearly limpid, with blackish brown tips; veins testaceous towards the base. Fore wings with a broad blackish brown band by the tip of the discal areolet. Abdomen bright red, with two short oblique white marks which diverge from each other at the base; tip black; under side white; appendages testaceous. Legs testaceous; fore tibiæ black above, armed with a long spur beneath; hind legs long, with black tibiæ and tarsi; spurs of the tibiæ of moderate size. Length of the body 3 lines; of the wings 10 lines.

a—c. Parà. From Mr. Bates' collection.

64. GLAUCOPIS PICTA.

Lutea, subtus testacea; caput nigrum; palpi apice nigri; antenna nigra, serrata, albo fasciata; thorax nigro univittatus; abdomen rufum, vitta nigra dorsali guttis cyaneis ornata, apice cyaneum; alæ limpidæ apice nigra, anticæ nigro subfasciatæ.

Luteous, testaceous beneath. Head black. Proboscis and palpi testaceous. Palpi moderately long, nearly straight, black above towards the tips; third joint very minute. Antennæ black, serrated, with a broad white band above towards the tips. Thorax with a black dorsal stripe, reddish luteous along each side. Wings limpid, very iridescent; tips black; a black band on the tip of the discal areolet, and a black spot opposite to this band on the hind border; veins and borders luteous at the base of the wing and between the discal areolet and the black of the tips. Hind wings pale

testaceous on the fore border. Abdomen red, fusiform, with two white marks at the base, with a black dorsal stripe which includes a row of blue dots, and with a blue tip; under side with a black tip. Legs testaceous, rather slender; hind tarsi and sometimes the hind tibiæ black above; median spurs of the hind tibiæ small. Length of the body 3 lines; of the wings 11 lines.

a, b. Parâ. From Mr. Bates' collection.

c. Santarem, Brazil. From Mr. Bates' collection.

65. GLAUCOPIS DORSALIS.

Lutea, disco dorsali nigro-fusco; caput testaceum, supra fuscum; antennæ nigrae, subpectinatae; alæ anticæ purpureo-fuscae dimidio basali maculaque magna limpidis, posticæ limpidæ purpureo-fusco marginatæ; pedes testacei, sericei.

Dark brown, luteous on each side and beneath. Head mostly testaceous, brown above. Proboscis tawny. Palpi testaceous, nearly straight; third joint rather long. Antennæ black, setaceous, minutely pectinated. Wings purplish brown, limpid, with brown borders for nearly half the length of the fore wings and for nearly the whole length of the hind wings. Fore wings with a large transverse limpid spot with yellow veins at two-thirds of the length. Legs testaceous, sericeous, slender; median spurs of the hind tibiæ very small. Length of the body 3 lines; of the wings 9 lines.

a, b. Santarem, Brazil. From Mr. Bates' collection.

66. GLAUCOPIS LUCETIUS.

Obscure fulvus, fusco vittatus, antennis pedibusque nigris; alæ fuscae, anticæ maculis duabus, posticæ vitta basali, limpidis fulvo marginatis.

Sphinx adscita Lucetius, *Cram. Pap. Exot.* iv. 129, pl. 357, f. D. Surinam.

67. GLAUCOPIS TEDA.

Nigro-fusca; palpi basi rufi; antennæ pectinatæ, apice simplices albæ; thorax anticæ rufo bistrigatus; abdomen subfusiforme, e maculis rufis bivittatum, basi albo bimaculatum, dimidio basali subtus albo; alæ anticæ maculis duabus magnis discalibus limpidis unaque basali rufa, posticæ limpidæ fusco marginatæ; pedes fusci, coxis femoribusque albis.

Glaucopis Teda, MSS.

Blackish brown. First joint of the palpi red. Antennæ pectinated for three-fourths of the length, white above towards the tips. Thorax with two red streaks in front. Fore wings with a red spot at the base, and with two large limpid spots in the disk, one before, the other beyond the middle. Hind wings limpid, with brown borders. Abdomen subfusiform; each side with a row of red spots, and with a white one at the base; under side with a white disk for more than half the length from the base. Legs brown; coxæ and femora mostly white. Length of the body $3\frac{1}{2}$ lines; of the wings 10 lines.

a, b. St. Catherine, Brazil. From M. Becker's collection.

68. GLAUCOPIS DISCIFERA.

Mas. *Nigro-viridis, subtus albo-hirta; caput albo guttatum; thorax et abdomen luteo bivittata, ille antice subtusque luteus; abdominis dimidium basale subtus testaceum; alæ limpida nigro marginatæ, antice nigro subfasciatæ.*

Male. Greenish black, rather short. Head with white dots above, clothed with white hairs beneath. Palpi long, slightly curved, white beneath; third joint nearly half the length of the second. Thorax and abdomen with a luteous stripe on each side along the whole length. Thorax in front and pectus luteous. Wings limpid, with purplish black borders which are very broad at the tips. Fore wings with a slender black mark across the tip of the discal areolet, and with the hind border opposite slightly widened; discal fold apparent near the tip of the discal areolet, united along the whole length beyond with the first inferior veinlet. Abdomen beneath with a large testaceous obconical compartment occupying nearly half the length from the base. Legs with white tomentum; fore tibiæ hairy and dentate beneath; spurs of the hind tibiæ moderately long. Length of the body $3\frac{1}{2}$ lines; of the wings 10 lines.

a. Pará. Presented by J. P. G. Smith, Esq.

69. GLAUCOPIS POSTICA.

Mas. *Lutea, gracilis; caput supra atrum cyaneo varium; palpi lutei apice nigri; antennæ pectinatæ; abdomen macula subquadrata basali dimidioque apicali purpureis; alæ limpida, nigro submarginatæ; pedes graciles, tarsis nigris basi luteis, tibiis posticis nigro vittatis.*

Male. Luteous, slender. Head deep black above, with blue reflections. Proboscis testaceous. Palpi luteous with black tips, rather long, slightly curved; third joint very small, not one-fourth of the length of the second. Antennæ moderately pectinated. Wings limpid with extremely narrow black borders, which are rather broader at the base and at the tips, especially on those of the hind wings; veins black, partly testaceous towards the base. Fore wings with an angular black mark on the veinlets at the tip of the discal areolet, no corresponding black mark on the hind border; discal fold very indistinct along the whole length. Abdomen slightly contracted near the base, purple for half the length from the tip, and with a purple subquadrate spot at the base. Legs slender; tarsi black, luteous at the base; hind tibiæ with black stripes, their middle and hind spurs small. Length of the body $3\frac{1}{2}$ lines; of the wings 10 lines.

a. Santarem, Brazil. From Mr. Bates' collection.

70. GLAUCOPIS BROMUS.

Ferruginea; alæ hyalinæ, margine omni nigro.

Zygæna Bromus, *Fabr. Sp. Ins.* ii. 161, 21; *Mant. Ins.* ii. 104, 26, *Ent. Syst.* iii. 1, 394, 28.

Sphinx adscita Bromus, *Cram. Pap. Exbt.* iii. 56, pl. 35, f. G.

Sphinx *Zygæna* Bromus, *Gmel. ed. Syst. Nat.* i. 5, 2394, 128.

Chrostosoma Bromus, *Hüb. Verz. Schmett.* 126, 1363.

Surinam.

Var. ? Lutea; caput supra nigrum, antice album; antennæ nigrae, subpectinatae; thorax nigro quadrivittatus; abdomen sublineare, vitta dorsali postica nigra; alæ limpidae, basi et antice luteæ, apice posticeque nigrae.

Luteous. Head black above, white in front. Proboscis ferruginous. Third joint of the palpi very small, acuminate. Antennæ black, slightly pectinated to the tips. Prothorax with one slender black stripe. Mesothorax with four black stripes. Wings limpid, luteous at the base and in front, black at the tips and along the hind border; veins black, luteous towards the base; transverse veinlets at the tip of the discal areolet forming a nearly right angle; discal fold apparent in the discal areolet, united with the first inferior vein along most of its length. Abdomen nearly linear; a black dorsal stripe along half the length from the tip. Spurs of the hind tibiæ small. Length of the body $3\frac{1}{2}$ lines; of the wings 10 lines.

a. Brazil. From Mr. Stevens' collection.

Group 16. CHROSTOSOMA.

Corpus gracile, cylindricum. Palpi mediocres; articulus 3us minimus. Antennæ usque ad apices subpectinatæ. Abdomen basi bituberculatum. Alæ limpidæ; plica discalis distincta. Pedes gracillimi; tibie posticæ calcaribus minimis.

Chrostosoma, Hübn. Verz. Schmett. 126.

Body slender, cylindrical. Palpi moderately long; third joint very small. Antennæ minutely pectinated to the tips. Wings limpid; discal fold apparent, joining the first inferior vein at very little beyond the tip of the discal areolet. Abdomen with a tubercle on each side at the base. Legs very slender; median and apical spurs of the hind tibie very small.

71. GLAUCOPIS EVADNES.

Lutea; caput fascia verticali nigra, sultus album; antenna nigra; alæ limpidæ; anticæ basi luteæ apice nigra.

Sphinx adscita Evadnes, Cram. Pap. Exot. iv. 129, pl. 357, f. A.
Chrostosoma Evadnes, Hübn. Verz. Schmett. 126, 1364.

a. Parâ. From Mr. Bates' collection.

Group 17. EUROTA.

Corpus sublineare, sat latum. Palpi breviusculi, vertice multo inferiores; articulus 3us 2i triente brevior. Antennæ subpectinatæ. Abdomen basi fere ad apicem latescens. Alæ amplæ, limpidæ, nigro latissime marginatæ; anticæ fascia latissima nigra. Pedes sat graciles; tibie posticæ mediocriter quadricarcatæ.

Eurota, MSS.

Fem. Body nearly linear, moderately broad. Palpi rather short, not near rising to the vertex; third joint less than one-third of the length of the second. Antennæ very minutely pectinated. Abdomen slightly widening from the base unto near the tip. Wings ample, limpid, with very broad black borders, especially so in the hind wings; fore wings with a very broad black discal band. Legs rather slender; hind tibie with four moderately long spurs.

Allied to *E. Lethe* and other *Euchromiæ*.

72. GLAUCOPIS PICTULA.

Nigro-fusca; antennæ nigrae, subpectinatae; prothorax flavo-hirtus; abdominis segmenta flavo fasciata, latera basi rufa; alæ anticæ fasciis duabus limpidis basi flavæ; posticæ fascia una limpida; tibiæ posticæ basi subtus albæ.

Eurota picta, MSS.

Blackish brown. Palpi rather short; third joint conical, very small. Antennæ black, minutely pectinated to the tips. Prothorax with pale yellow hairs, among which on each side are some red hairs. Fore wings pale yellow at the base, and with two limpid bands which do not extend to the borders, the first on the discal areolet, the second beyond it and longer than the first. Hind wings with a limpid band which does not near extend to the hind border. Abdomen with a yellow band on each segment, bright red on each side towards the base. Legs rather slender; hind tibiæ white beneath at the base, their spurs rather long. Length of the body 5 lines; of the wings 16 lines.

a. Venezuela. From M. Becker's collection.

Group 18. HYDA.

Corpus sat gracile, pallidum. Palpi verticem non attingentes; articulus 3us minimus, 2o quadruplo brevior. Abdomen basi contractum. Alæ mediocres, limpidæ; anticæ apice maculaque postica nigris. Pedes sat graciles; tibiæ posticæ mediocriter quadricaratae.

Body rather slender, pale. Palpi not rising to the vertex; third joint very small, not more than one-fourth of the length of the second. Abdomen contracted towards the base. Wings of moderate size, limpid; fore wings with black tips and a black spot on the hind angle. Legs rather slender; hind tibiæ with four spurs of moderate size.

73. GLAUCOPIS DIAPHANA.

Atra ; antennæ pectinatæ ; prothorax, thoracis vittæ duæ et abdominis latera lutea ; alæ hyalinæ nigro marginatæ, anticæ areola discali nigro terminata. Long. 7 ; alar. 14 lin.

Glaucopis diaphana, Anon. Ins. Surinam, 185, pl. 81.

Larva hairy, tufted, like some of the larvæ of *Bombycidæ*.
Surinam.

74. GLAUCOPIS SINGULARIS.

Mas. Lutea, subtus testacea ; caput nigrum, vertice cyaneo ; oculi albo marginati ; thorax anticæ niger testaceo bivittatus, cyaneæ subnotatus ; alæ sublimpidæ vix testaceæ, anticæ latæ nigro terminatæ et unimaculatæ.

Male. Pale luteous, testaceous beneath. Head black, white about the borders of the eyes ; vertex blue. Palpi rather long, slightly curved ; third joint very small, much less than one-fourth of the length of the second. Thorax in front black with two testaceous stripes, slightly marked with blue. Wings nearly limpid, with a very slight testaceous tinge. Fore wings broad, with black tips, and with a black spot between the tips of the submedian vein and of the first inferior veinlet ; transverse veinlets forming a slightly obtuse angle at the tip of the discal areolet ; discal fold not apparent in the discal areolet but distinct beyond it. Hind wings small. Legs stout ; middle and apical spurs of the hind tibiæ rather long. Length of the body $3\frac{1}{2}$ lines ; of the wings 11 lines.

a. Parâ. From Mr. Bates' collection.

75. GLAUCOPIS BASILUTEA.

Lutea ; antennæ nigrae, subpectinatæ ; palpi flavi, apice nigri ; thorax nigro bimaculatus ; abdomen breve, flavum, anticæ e maculis nigris trivittatum, maculis posticis lateralibus cyaneis, apice nigrum ; alæ limpidæ, latæ, nigro submarginatæ, basi luteæ.

Bright luteous. Head and pectus with yellow hairs. Proboscis and antennæ black. Palpi yellow, moderately long, black towards the tips ; third joint small. Antennæ setaceous, minutely pectinated. Thorax with a black spot on each shoulder. Wings

limpid, broad, bright luteous towards the base, with slight black borders elsewhere. Fore wings with a black and a white dot on the base of the fore border, with a short black band on the border of the luteous part, and with another on the tip of the discal areolet where the transverse veinlets are nearly straight; discal fold not appearing in the discal areolet, but visible from it to the tip of the wing. Abdomen short, yellow, with three rows of black spots towards the base, luteous and with blue spots along each side towards the tip which is black and shining; under side bright yellow, with black spots along each side; towards the base a large subquadrate scutcheon-like black compartment, which is bordered with white in front and behind; tip deep black, with blue spots along each side. Fore legs black; their tibiæ slightly dentate beneath. Posterior legs testaceous, with yellow tomentum; tarsi, tips of the femora and of the tibiæ and the base of the latter black; middle and apical spurs of the hind tibiæ of moderate length. Length of the body 4 lines; of the wings 10 lines.

a. Pernambuco. Presented by J. P. G. Smith, Esq.

76. GLAUCOPIS CONSORS.

Mas. *Atra, albo guttata; antennæ sat late pectinatæ; thorax et abdomen fulvo bimaculata; alæ subluridæ, fere limpidæ, margine postico areolæque discali apice nigris.*

Deep black. Head with white dots above. Palpi stout; third joint very small, hardly one-fourth of the length of the second. Antennæ rather deeply pectinated. Thorax with a white spot on each side in front, and with a tawny spot by the base of each fore wing. Wings nearly limpid, with a very slight lurid tinge, and with slender black hind borders; veins tawny in front and towards the base. Fore wings broad; transverse veinlets at the tip of the discal areolet forming a nearly right angle, the fore part very slightly clouded with black; discal fold not apparent in the discal areolet but very distinct beyond it, and united for some space with the first inferior areolet; black of the hind border slightly widened between the tips of the submedian vein and of the fourth inferior areolet. Abdomen mutilated, with white spots on each side and beneath and with a tawny spot on each side of the third segment. Legs marked with white; fore tibiæ dentate beneath; hind tibiæ slightly curved, their spurs of moderate length. Length of the body 6 lines; of the wings 18 lines.

a. Brazil. From Mr. Bates' collection.

77. *GLAUCOPIS SORTITA*.

Mas. *Atra, caput antice album; antennæ late pectinatæ; thorax albo quadrimaculatus; abdomen e maculis albis trivittatum; alæ hyalinæ, subluridæ, antice strigis duabus rufis, una antica subapicali, altera postica basali.*

Male. Deep black. Head white in front. Palpi long, nearly straight; third joint about one-third of the length of the second. Antennæ deeply pectinated, white above near the tips. Thorax with a white spot on each side in front, and another at the base of each fore wing. Pectus with some white marks. Wings hyaline, with a slight lurid tinge; hind borders and tips black; veins testaceous, black towards the tips. Fore wings moderately broad, with a red streak on the fore border towards the tip, and another on the hind border at the base; black border widened at the tips; discal areolet-veinlet forming an almost right angle; discal fold distinct along the apical half of the discal areolet and still more so beyond it where it is united for most of its length with the first inferior veinlet which is much curved. Hind wings with a luteous tapering streak along the fore border; hind border ciliated towards the base. Abdomen with three rows of white spots and towards the tip with tufts of hairs on each side; under side with a few white spots. Legs rather long and stout; coxæ and knees with white tomentum; fore tibiæ slightly dentate; hind tibiæ with long middle and apical spurs. Length of the body 7 lines; of the wings 18 lines.

a. Brazil. From Mr. Bates' collection.

78. *GLAUCOPIS STIPATA*.

Mas. *Atra, linearis, gracilis; caput album, vertice nigro; palpi subtus albi; antennæ sat late pectinatæ; thorax albo bimaculatus et bivittatus; abdomen longum, e maculis flavis trivittatum, lateribus rufis, ventre flavo, apice rufo nigroque hirtum; alæ limpidæ, nigro marginatæ, fasciæque ad areolæ discalis apicem nigra; pedes albo varii.*

Male. Black, slender, linear. Head white, black on the vertex. Palpi white beneath, slightly curved; third joint very small, not more than one-sixth of the length of the second. Antennæ setaceous, rather deeply pectinated. Thorax with two white spots on each side in front and with a white stripe on each side. Wings

limpid, with black borders which are broadest at the tips; a slender black band on the veinlets at the tip of the discal areolet which hardly form an angle; discal fold obsolete. Abdomen long, with three rows of yellow spots; sides bright red; under side mostly yellow; tip with a large tuft of very bright red hairs, and with a small tuft of black hairs in the middle. Appendages long, testaceous; outer pair extending beyond the rest, curved towards each other, contiguous at the tips; inner pair curved downward. Legs moderately stout, varied with white; spurs of the hind tibiæ white, of middling size; fore tibiæ armed with a long spine beneath. Length of the body 7 lines; of the wings 16 lines.

a, b. Parâ. From Mr. Bates' collection.

79. GLAUCOPIS ENAGRUS.

Sphinx adscita Enagrus, *Cram. Pap. Exot.* iii. 94, pl. 248, f. D.

Autochloris Enagrus, *Hübner Verz. Schmett.* 125, 1353.

Surinam.

Var. ? *Atra*, *cyaneo alboque maculata*; *abdomen e maculis cyaneis antice bivittatum postice trivittatum*; *alæ hyalinæ nigro late marginatæ, antice subluridæ nigro fasciatæ.*

Deep black. Head blue above, with a white streak on each side in front. Fore part of the thorax with two blue spots in the middle, and one on each side; a white spot on the disk. Pectus with some white spots. Wings hyaline with very broad black borders, especially at the tips. Fore wings with a slight lurid tinge, and with a black band across the tip of the discal areolet; discal fold very distinct and like a vein along the whole length. Hind wings with a slight opaline tint. Abdomen with two white spots at the base, and with a row of blue spots on each side, and a short row in the middle near the tip; coxæ white on one side. Length of the body 8 lines; of the wings 22 lines.

a. Ega, on the Amazon. From Mr. Bates' collection.

80. GLAUCOPIS LEUCASPIS.

Atra; *caput supra cyaneum, lateribus palpisque subtus albis*; *thorax aureo-viridi trivittatus*; *abdomen e maculis aureo-viridibus trivittatum, subtus maculis albis bivittatum, apice rufhirtum*; *alæ limpidæ, nigro marginatæ fasciæque ad areolæ discalis apicem nigra, posticæ apice nigra*; *coxæ et femora alba.*

Var. β. Sphinx adscita Caenus, *Cram. Pap. Exot. Schmelt.* pl. 224, f. E.

Sesia hæmorrhoidalis, *Fabr. Ent. Syst.* iii. 1, 384, 18.

Æthria leucaspis, *Hübner. Verz. Schmelt.* 120, 1299.

Sphinx Zygæna leucaspis, *Gmel. ed. Syst. Nat.* i. 5, 2395, 126.

Berbice.

Deep black. Head bright blue above, white on each side. Palpi white beneath. Thorax with three golden green stripes united in front. Wings limpid, with black borders and a black mark across the tip of the discal areolet; hind wings with black tips. Abdomen with three rows of golden green spots; under side with two rows of white spots; tip with bright red hairs. Coxæ and femora mostly white. Length of the body 8—9 lines; of the wings 20 lines.

Var β. Abdomen wholly blue above with the exception of the tip.

a. Demerara. Presented by J. S. Bowerbank, Esq.

b—d. Venezuela. From M. Becker's collection.

81. GLAUCOPIS ANDROMACHA.

Atræ; alæ hyalinæ, margine fasciæque nigris; anus sanguineus,

Sphinx Andromacha, *Fabr. Sp. Ins.* ii. 161, 20; *Mant. Ins.* ii. 104, 24; *Ent. Syst.* iii. 1, 393, 26.

Eunomia Andromacha, *Hübner. Verz. Schmelt.* 125, 1357.

Brazil.

82. GLAUCOPIS CHRYSOGASTRA.

Fusca; thorax interrupte flavo vittatus; alæ limpida, undique nigro marginatæ: abdomen coccineum, maculis dorsalibus nigro marginatis flavis, fasciculo maximo apicali nigro, subtus læte flavum. Long. alar. 18 lin.

Glaucopis chrysogastra, *Perty, Delect. Anim. Artic. Bras.* 157, pl. 31, f. 10.

Brazil.

Group 19. EUNOMIA.

Corpus gracile, hirtum. Palpi sat longi; articulus 3us minimus. Antennæ ad apices pectinatæ, supra plumosæ, apud medium fusiformes. Alæ mediocres, limpidæ, marginibus et anticarum striga discali obscuris. Abdomen basi contractum. Pedes graciles; tibis posticæ calcaribus quatuor mediocribus.

Eunomia, Hübn. Verz. Schmett. 125.

Body slender, hairy. Palpi rather long; third joint very short and small. Antennæ pectinated beneath to the tips, plumose above and fusiform in the middle. Wings moderately broad, limpid, except the border and a mark in the fore wings across the tip of the discal areolet. Discal areolet emitting six veins, one of them spurious, as are also two others in the areolets towards the fore border. Abdomen contracted towards the base. Legs slender; median and apical spurs of the hind tibis of moderate length.

83. GLAUCOPIS SANGUIFLUA.

Atra, gracilis; palpi subtus albi; antennæ supra minus plumosæ; thorax albo bimaculatus cyaneoque biguttatus et bivittatus; abdomen e maculis cyaneis univittatum, apice rufo-hirtum; alæ hyalinæ nigro marginatæ, anticæ basi cyaneo-nigræ.

Eunomia sanguiflua (Sphinx papilionoides, *Glaucopis hyalina*), Geyer, Zutr. Samml. Exot. Schmett. 25, 349, f. 697, 698.

Bahia.

Deep black, slender. Antennæ less plumose above. Palpi white beneath. Thorax with a white spot on each shoulder, a blue dot on each side in front, and two blue stripes on the disk. Wings hyaline, bordered with black. Fore wings black at the base with a blue tinge; this black extends very obliquely, in a straight line, and without forming an angle to the hind border; a black mark across the tip of the discal areolet. Abdomen slightly contracted towards the base, and with a dorsal row of blue dots; tip clothed with brilliant red hairs. Length of the body 7 lines; of the wings 16 lines.

a. Rio Janeiro. From Mr. Stevens' collection.

84. GLAUCOPIS FRONTALIS.

Mas. *Atra*; *caput et thorax antice lateribusque cyanea*; *abdomen basi cyaneum aut viride, apice rufum*; *alæ limpidæ nigro marginatæ, anticæ sat angustæ areola discali apice nigro marginata.*

Male. Deep black. Head bright blue. Palpi moderately long, nearly straight; third joint less than one-fourth of the length of the second. Antennæ moderately deeply pectinated. Thorax partly blue in front and at the base of each fore wing and on each side. Wings limpid, with black borders, which are widest on the fore border at the base, and also on the fore wings at the tips and at the base of the hind border. Fore wings rather narrow, with a black mark across the tip of the discal areolet; discal fold distinct towards the tip of the discal areolet and from thence to the tip of the wing. Abdomen blue or green on each side at the base, tapering towards the tip which is bright red. Legs moderately long; fore tibiæ grooved beneath; middle and apical spurs of the hind tibiæ rather short. Length of the body 7 lines; of the wings 18 lines.

a. Brazil. From Mr. Bates' collection.

Group 20. ÆTHRIA.

Mas. *Corpus cylindricum, sat validum, dense pilosum.* Palpi longiusculi; articulus 3us minimus. Antennæ subfusiformæ, late pectinatæ, supra plumosæ. Alæ mediocres, limpidæ, nigro marginatæ; areola discalis nigro terminata. Pedes longiusculi, sat graciles; tibiæ posticæ mediocriter calcaratæ.

Æthria, Hübn. Verz. Schmett. 120.

Body cylindrical, moderately stout, thickly clothed with hairs. Palpi rather long; third joint very short and small. Antennæ thickly pectinated beneath to the tips, plumose above especially about the middle, which is thereby fusiform. Wings moderately broad, limpid except the border and a mark in the fore wings across the tip of the discal areolet; discal areolet emitting seven veins towards the tip of the wing; one or more of them obsolete towards its base. Legs rather long and slender; spurs of the tibiæ moderately long.

85. GLAUCOPIS HÆMORRHOIDALIS.

Atra; humeri albi; abdomen triente aut dimidio apicali basique coccineis; alæ hyalinæ, nigro late marginatæ et semifasciatæ.

Sphinx adscita hæmorrhoidalis, Stoll, Suppl. Cram. Pap. Exot. v. 53, pl. 12, f. 1.

Æthria hæmorrhusa, Hübn. Verz. Suppl. 120, 1300.

a. Rio Janeiro. From Mr. Bates' collection.

b. Brazil. From Mr. Bates' collection.

c—e. Brazil. From Mr. Milne's collection.

f. Brazil. Presented by H. Low, jun., Esq.

g. Brazil. Presented by E. Doubleday, Esq.

Group 21. DINIA.

Corpus lineare, planum, latum, pilosum. Palpi longiusculi; articulus 3us minimus. Antennæ maris pectinatæ, apice serratæ, supra plumosæ. Alæ latæ, limpidæ nigro marginatæ; areola discalis nigro marginata. Abdominis latera fasciculata. Pedes graciles; tibie posticæ mediocriter calcaratæ.

Body linear, hairy, rather flat and broad. Palpi rather long; third joint very short and small. Antennæ pectinated beneath nearly to the tips where they are serrated, plumose above and serrated towards the middle. Wings broad, limpid except the border and a mark across the tip of the discal areolet which emits five veins, between which two or three folds may be indistinctly traced in some specimens. Abdomen tufted along each side except near the base. Legs slender; spurs of the hind tibie moderately long.

86. GLAUCOPIS AUGE.

Nigra, lateribus pilosis sanguineis; alæ fenestratæ, postice nigra; antennæ pectinatæ.

Sphinx Auge, Linn. Syst. Nat. ii. 807, 46.

Zygæna Auge, Fabr. Sp. Ins. ii. 165, 41; Mant. Ins. ii. 106, 50; Ent. Syst. iii. 1, 401, 53.

Sphinx adscita Eagrus, Cram. Pap. Exot. iii. 10, pl. 108, f. C.

Sphinx Zygæna Auge, *Gmel. ed. Syst. Nat.* i. 5, 2398, 46.

Æthria Eagre? *Hübner. Verz. Schmett.* 120, 1301.

Eunomia Auge? *Hübner. Verz. Schmett.* 125, 1357.

Surinam.

Var. β. Fore and hind borders of the fore wings more or less varied with red, especially towards the base.

Var. γ. Like *Var. β.* Mark across the tip of the discal areolet very slender.

Var. δ. Like *Var. γ.* Black hind border of the hind wings very slender.

Glaucopis saucia, *MSS.*

a—d. Venezuela. From Mr. Dyson's collection.

e. Honduras. From Mr. Miller's collection.

f. Brazil. From Mr. Bates' collection.

g. Colombia. From M. Becker's collection.

87. GLAUCOPIS SUBAPICALIS.

Atra, sat gracilis; abdomen macula magna subquadrata subapicali rufa; alæ limpide nigro marginatæ, anticæ basi et apud areolæ discalis apicem nigrae.

Deep black, rather slender. Wings limpid, bordered with black. Fore wings black at the base, and with a black band across the base of the discal areolet. Hind wings with a very broad black band on the hind border. Abdomen with a large subquadrate red spot above near the tip, which has a tuft of short hairs. Length of the body 7 lines; of the wings 16 lines.

a. ———?

88. GLAUCOPIS FINALIS.

Atra, gracilis; palpi subtus albi; thorax albo bimaculatus cyaneo-que biguttatus et bivittatus; abdomen basi subtus album; apice rufescente-hirtum; alæ limpide nigro marginatæ, anticæ basi cyaneo-nigrae.

Closely allied to *G. terminalis*. Deep black, slender. Palpi white beneath. Thorax with a white spot on each shoulder, a blue

dot on each side in front, and two blue stripes on the disk. Wings limpid, bordered with black. Fore wings black at the base with a blue tinge; this black forms an angle, and extends slightly obliquely and for a greater length than in *G. sanguiflua* before it joins the hind border. Abdomen white beneath the contracted part, without dorsal spots; tip clothed with reddish orange hairs. Length of the body 6—7 lines; of the wings 14—16 lines.

a, b. Parà. From Mr. Bates' collection.

c. Venezuela. From Mr. Dyson's collection.

89. GLAUCOPIS OPHION.

Mas. *Atra, gracilis*; caput, thorax anticus, vittæ duæ et scutellum cyanea; abdomen obclavatum, apicem versus cyaneum, apice rufo-hirtum, basi lateribusque albidis; alæ hyalinæ, sat latæ, subluridæ, basi atræ.

Fœm. *Nigra*; caput albo bimaculatum; thoracis latera sordide alba; abdomen viride, basi subtus maculisque lateralibus albis, apice rufo nigroque hirtum; alæ limpidæ.

Glaucopis Ophion, MSS.

Male. Deep black, slender. Head dark blue. Antennæ pectinated to full three-fourths of the length. Fore part of thorax, two stripes and scutellum dark blue. Wings hyaline, rather broad, with a slight lurid tinge, deep black at the base; veins black, testaceous towards the base; transverse veinlets at the tip of the discal areolet hardly forming an angle; no trace of the discal fold; a very slender black border about the tips and behind. Abdomen whitish on each side and beneath at the base where it is compressed, slightly widening from thence to the tip which is clothed with bright red hairs, dark blue above near the tip. Legs slender; spurs of the hind tibiæ small.

Black. Head with two white spots in front. Palpi white beneath. Thorax dingy white along each side. Wings limpid, Abdomen green, white beneath and with a row of white spots along each side; tip clothed with red hairs and on the middle above with black hairs. Length of the body 5 lines; of the wings 14 lines.

a, b. Sta. Carthagena, Brazil. From M. Becker's collection.

c. Venezuela. From M. Becker's collection.

Group 22. LYCOREA.

Mas. Corpus nigrum, gracile, sublineare. Palpi verticem paullo superantes; articulus 3us gracilis, 2o triplo brevior. Antennæ late pectinatæ. Abdomen obclavatum, basi contractum. Alæ limpidæ, nigro marginatæ. Pedes graciles; tibiæ anticæ subtus dentatæ; posticæ calcaribus quatuor minimis.

Male. Black. Body slender, nearly linear. Palpi rising a little above the vertex; third joint slender, full one-third of the length of the second. Antennæ deeply pectinated. Abdomen obclavate, contracted at the base. Wings limpid with black borders; discal fold distinct, in connexion with the first inferior vein for most of the length beyond the discal areolet. Legs slender; fore tibiæ dentate beneath; hind tibiæ with four very minute spurs.

90. GLAUCOPIS CLAVATA.

Mas. *Atra, gracilis*; proboscis testacea; antennæ late pectinatæ; abdomen obclavatum; alæ limpidæ, nigro marginatæ, basi nigre; pedes graciles, femoribus anticis ad partem albis.

Male. Deep black, slender. Proboscis testaceous. Palpi rather long, nearly straight; third joint slender, not more than one-fourth of the length of the second. Antennæ testaceous, deeply pectinated. Wings limpid, black at the base, with very slight black borders which are rather broad at the tips of the fore wings; transverse veinlets of the discal areolet forming an acute angle; discal fold apparent towards the tip of the discal areolet, and from thence to the tip of the wing connected for some space with the first inferior veinlet. Abdomen widening from the base to the tip. Legs slender; fore coxæ and fore femora partly white; fore tibiæ with a spine beneath; spurs of the hind tibiæ of moderate length. Length of the body 7 lines; of the wings 16 lines.

a. Brazil. From Mr. Bates' collection.

Group 23. TRICHURA.

Corpus gracile, subpilosum. Palpi longiusculi, arcuati; articulus 3us minimus. Antennæ usque ad apices pectinatæ. Alæ hyalinæ, plerumque nigro marginatæ. Abdomen basi coarctatum

ant petiolatum, apice pilo longo hirsuto instructum. Pedes graciles; tibiæ posticæ calcaribus quatuor abbreviatis.

Trichura, Hübn. Verz. Schmett. 126.

Body slender, slightly hairy. Palpi rather long, curved; third joint very short and small. Antennæ pectinated to the tips. Wings hyaline, excepting the border, and a mark across the tip of the discal areolet. Abdomen contracted or petiolated near the base; its tip furnished with a long hairy appendage which is nearly or quite as long as the body. Legs slender; median and apical spurs of the tibiæ short.

91. GLAUCOPIS LATIFASCIA.

Atra; caput, thorax anticus lateraque viridi-metallica; antennæ subpectinatae; abdomen nigro-viride, subtus basi album; cauda abdomine paullo longior; alæ limpidæ, nigro marginatæ.

Deep black. Head, thorax in front and along each side mostly metallic green. Palpi much curved. Antennæ slightly pectinated. Wings limpid, with a black margin which is very broad at the base and on the apical half of the hind border; a very broad slightly oblique band across the tip of the discal areolet. Abdomen blackish green, contracted part white beneath; caudal appendage a little longer than the abdomen. Length of the body 6—7 lines; of the wings 14—16 lines.

♂—c. Parâ. From Mr. Bates' collection.

92. GLAUCOPIS CAUDATA.

Alæ flavo-hyalinæ apice fusæ; corpus maculis auratis.

Zygæna caudata, Fabr. Sp. Ins. ii. 165, 43; Mant. Ins. ii. 106, 53; Ent. Syst. iii. 1, 403, 58.

——— *Seba*, Mus. iv. pl. 25, f. 17, (fœm.) *Drury*, Ins. ii. pl. 27, f. 2, (fœm.)

Sphinx caudata, Pall. Spic. Zool. ix. 27, pl. 2, f. 8, (mas).

Sphinx coarctata, Drury, Append. ii. Cram. Pap. i. pl. 4, f. F, G.

Sphinx Zygæna caudata, Gmel. ed. Syst. Nat. i. 5, 2398, 147.

Trichura Druryi, Hübn. Verz. Schmett. 126, 1365.

Glaucopis coarctata, Westw. ed. Drury, ii. 50, pl. 27, f. 2.

South America.

- a. Brazil. From Mr. Argent's collection.
- b. Pará. From Mr. Bates' collection.
- c. Pernambuco. Presented by J. P. G. Smith, Esq.
- d. Rio Janeiro. From Mr. Stevens' collection.
- e. Honduras. From Mr. Dyson's collection.
- f. ———?

93. GLAUCOPIS ESMERALDA.

Atra; caput, thorax anticus vittæque tres dorsales viridia; abdomen viridi-micante bifasciatum et e maculis trivittatum, basi subtus albo; alæ limpidæ, nigro vix marginatæ.

Deep black. Head, fore part of thorax, and three dorsal stripes bright green; the middle stripe interrupted and dilated into bands on the hinder part of the thorax. Wings quite limpid; veins black, tawny towards the base; borders and tip of the discal areolet hardly coloured with black, except the hinder angle of the fore wings and the tips of the hind wings. Abdomen adorned with brilliant green, which forms two bands near the base and three rows of spots from thence to the tip; under side white on the contracted part and with two white spots behind it. Length of the body 9 lines; of the wing 18 lines.

- a. Honduras. From Mr. Dyson's collection.

94. GLAUCOPIS MELAS.

Sphinx adscita Melas, Cram. Pap. Exot. i. 71, pl. 45, f. G.
Isanthrene Melas, Hübn. Verz. Schmett. 125, 1359.
 Surinam.

Var. ? *Atra; caput, antennæ palpique lutea; antennæ fere ad apices pectinatæ; thorax luteo varius; pectus cyaneum; abdomen subfusiforme, basi subcontractum, fasciis maculisque luteis, maculis lateralibus viridi-cyaneis, vitta apicali aurata, ventre basi albo; alæ luteo-hyalinæ, nigro ad partem marginatæ; pedes lutei, nigro varii.*

Deep black. Head luteous, black on the hinder part of the vertex. Palpi luteous, curved, rather long; third joint very minute. Antennæ pectinated nearly to the tips. Four spots in front of the thorax, four streaks on the disk and scutellum luteous. Pectus blue

with luteous spots. Wings luteous-hyaline, slightly bordered with black at the tips and along part of the hind border; veins luteous, black towards the tips; transverse veinlets at the tip of the discal areolet forming an almost straight line; no trace of the discal fold. Abdomen subfusiform, slightly contracted near the base; hind borders of the segments with luteous bands, and towards the tip with luteous dorsal spots and with blue-green spots on each side; a gilded green dorsal stripe on the last segment; under side white at the base, near which there is a white spot on each side. Legs luteous, rather slender; hind femora, hind tarsi, and tips of the anterior tarsi black; hind tibiæ with moderately long spurs. Length of the body 8—9 lines; of the wings 20—22 lines.

a, b. Parà. From Mr. Bates' collection.

Group 24. PSEUDOSPHEX.

Palpi caput non superantes; articulus 3us 2i triente non longior. Antennæ compressæ, apud medium dilatatæ. Abdomen basi petiolatum aut compressum. Alæ anticæ angustæ; plica discalis distincta. Tibiæ anticæ subtus dentatæ, posticæ calcaribus mediis et apicalibus minutis.

Pseudosphex, Hübn. Verz. Schm. 127.

Myrmecopsis, Newman, Zool. viii. Append. cxxii.

Body nearly bare. Palpi not reaching the vertex; third joint not more than one-third of the length of the second. Antennæ compressed, dilated in the middle. Abdomen compressed or petiolated at the base. Fore wings narrow, mostly limpid; discal fold distinct. Fore tibiæ dentate beneath; hind tibiæ with four minute spurs.

95. GLAUCOPIS ZETHUS.

Testacea; antennæ nigrae; thorax nigro quadrivittatus; alæ limpida, costa venisque fulvis; pedes straminei.

Pseudosphex Zethus, Hübn. Verz. Schm. 127, 1367; Samml. Exot. Schm. 13, 25, f. 49, 50.

a. Santarem, Brazil. From Mr. Bates' collection.

b. Parà. From Mr. Bates' collection.

c. Tapayos, Brazil. From Mr. Bates' collection.

96. GLAUCOPIS TESTACEA.

Testacea, gracilis; caput ferrugineum, antice albidum, subtus flavum; antennæ apud medium piceæ; thorax disco antico piceo, fascia anteriore maculisque lateralibus flavis; alæ limpidæ, antice apud costam subluridæ.

Testaceous, slender. Head ferruginous above, whitish in front, yellow on each side and beneath. Antennæ piceous above in the middle for near one-third of the length. Disk of the thorax pitchy in front; an angular yellow band on the fore border and some yellow marks on each side. Wings limpid; fore wings with a slight lurid tinge in front; veins testaceous; transverse veinlets at the tip of the discal areolet forming a much more acute angle than in *G. Zethus*. Length of the body 5 lines; of the wings 12 lines.

a. Demerara.

97. GLAUCOPIS POLISTES.

Nigra; alæ nudæ hyalinæ, antice vitta lata costali fuliginea maculam stigmatoidem pulcherrime chalybeam includente; pedes nigri, tarsis testaceis.

Pseudosphex Polistes, Hüb. Verz. Schmett. 127, 1366; Samml. Exot. Schmett. 12, 20, f. 39, 40.

Myrmecopsis Eumenides, Newm. Zool. viii. Append. cxxii.

Formicam alatham exacte simulans. Antennæ corporis dimidio vix longiores, dimidio basali bipectinatae, deinde serratae, denique subserratae, apice gracillimæ setacæ. Alarum anticarum areola discalis profunde divisa; alæ nudæ, squamis nisi venularum nullo modo indutæ. Abdomen petiolatum, petiolo valde restricto.

a. Ega, Amazon River, Brazil. From Mr. Bates' collection.

98. GLAUCOPIS TARSALIS.

Obscure atra; caput supra viride; antennæ maris usque ad bis-trientem pectinatae; alæ limpidæ, antice fuscae, areola discali apice purpurea; abdomen valde convexum, petiolo testaceo gracillimo subtus albo; pedes validi, tarsis calcaribusque albidis.

Deep dull black. Head dark green above. Antennæ of the male rather deeply pectinated for full two-thirds of the length. Wings limpid, brown in front along most of the length; veins black; transverse veinlets at the tip of the discal areolet forming a very acute angle, clouded with bright purple; no trace of the discal fold. Petiole testaceous, very slender, white beneath. Abdomen very convex, its length without the petiole less than twice its breadth. Legs rather stout; tarsi and spurs of the tibiæ whitish; tips of the latter brown. Length of the body 6—7 lines; of the wings 14—16 lines.

a—c. Parà. From Mr. Bates' collection.

99. GLAUCOPIS SEMIHYALINA.

Cyanea; palpi subtus albi; antennæ nigrae, usque ad bis-trientem pectinatæ, basi supra albida; thoracis discus niger, cyaneo bivittatus; abdomen fusiforme, petiolatum; alæ anticæ sublimpidæ, anticæ cyaneo-fusca; posticæ cyaneo-fusca, basi sublimpidæ; pedes nigri, tarsi basi subtusque genubusque albidis.

Dark blue. Antennæ and palpi black. Palpi white beneath. Antennæ pectinated to two-thirds of the length, whitish at the base above. Disk of the thorax black, with two blue stripes. Metathorax mostly black. Fore wings nearly limpid, dark brown for half the breadth and for the whole length except at the base, and about the angle on the hind border; the brown tinged with bright blue especially about the veinlets at the tip of the discal areolet which form a very acute angle; veins black. Hind wings blue-brown except at the base. Abdomen fusiform, rather convex; petiole very distinct, whitish beneath and on the disk above. Legs black, rather stout; tarsi beneath and at the base and knees whitish. Length of the body 8 lines; of the wings 20 lines.

a. Parà. From Mr. Bates' collection.

Group 25. HEREA.

Palpi caput non superantes; articulus 3us 2i triente non longior. Antennæ setacæ, maris pectinatæ, fœm. vix pectinatæ. Abdomen basi petiolatum. Alæ anticæ sat latæ; areola discalis venulis tantum tribus posticis; plica discalis obsoleta.

Palpi not rising above the head; third joint not more than one-third of the length of the second. Antennæ setaceous, pectinated

in the male, hardly so in the female. Abdomen petiolated at the base. Fore wings moderately broad; discal areolet with but three hind veinlets; discal fold obsolete; hind wings not half the length or breadth of the fore wings.

100. GLAUCOPIS METAXANTHUS.

Atra, gracilis; antennæ plus dimidio basali pectinatæ; alæ limpidæ, nigro marginatæ; abdomen aurantiacum, vix convexum, basi apice vittaque dorsali nigris; pedes graciles.

Deep black, slender. Antennæ minutely pectinated for more than half the length from the base. Wings quite limpid, with narrow black borders; veins black; transverse veinlets at the tip of the discal areolet forming a straight line; discal fold wanting. Abdomen orange, hardly convex, black above at the base and at the tip, and with a slight black dorsal stripe. Legs slender; spurs of the tibiæ of moderate length. Length of the body 4 lines; of the wings 11 lines.

a. Parâ. From Mr. Bates' collection.

101. GLAUCOPIS RUFICEPS.

Nigra, convexa, gracilis; caput et thorax anticus rufo ciliata; alæ limpidæ, nigro marginatæ; abdomen subfusiforme subtus basi album; pedes gracillimi.

Black, dull, convex, slender. Head above and adjoining part of the thorax clothed with red hairs. Wings quite limpid, with narrow black borders; veins black; transverse veinlets at the tip of the discal areolet forming a straight line clouded with black; discal fold wanting. Abdomen fusiform, white beneath towards the base. Legs very slender; spurs of the tibiæ of moderate size. Length of the body $4\frac{1}{2}$ —5 lines; of the wings 12 lines.

a—c. Parâ. From Mr. Bates' collection.

102. GLAUCOPIS PLATYLEUCA.

Atra, gracilis; caput et palpi subtus alba; antennæ sat late pectinatæ, apice simplices; thorax fascia antica subcinerea vittisque duabus lateralibus albis; pectus et abdomen subtus alba; alæ limpidæ, anticæ latissimæ; pedes testacei, graciles.

Deep black, small. Head white, black on the vertex. Palpi nearly straight, white beneath; third joint long; a little shorter than the second. Antennæ rather deeply pectinated, but not to the tips. Thorax with a rather broad grayish band in front, and a white stripe on each side. Pectus white. Wings limpid. Fore wings very broad; veins slender; no trace of the discal fold. Hind wings small, narrow and almost pointed at the tips; fore border and veins white with black tips. Abdomen white beneath. Legs dull testaceous, slender, mostly clothed with white; fore tibiæ dentate beneath; middle and apical spurs of the hind tibiæ small. Length of the body 3 lines; of the wings 10 lines.

a. Venezuela. From Mr. Dyson's collection.

Group ——— ?

103. GLAUCOPIS FENESTRATA.

Alæ antica nigra, macula magna discali subocellata fenestrata; postica fenestrata, margine nigro; palpi pedesque coccinei.
Long. alar. 30 lin.

Sphinx fenestrata, Drury, *Ins.* i. 54, pl. 25, f. 3.

Glaucopis fenestrata, Westw. ed. Drury, i. 49, pl. 25, f. 3.

Eutomis fenestra, Hübn. Verz. Schmett. 122, 1323.

Sphinx adscita fenestrata, Stoll, Cram. Pap. Exot. v. 140, pl. 30, f. 5.

Jamaica.

104. GLAUCOPIS CAPISTRATA.

Alæ nigra, antica fasciis duabus, postica disco fenestratis; abdomen sanguineum, dorso nigro.

Zygæna capistrata, Fabr. Sp. Ins. ii. 165, 42; Mant. Ins. ii. 106, 52; Ent. Syst. iii. 1, 402, 55.

Sphinx Zygæna capistrata, Gmel. ed. Syst. Nat. i. 5, 2398, 146.

America.

105. GLAUCOPIS HALTERATA.

Alæ antica hyalina macula fusca; postica brevissima filiformes nigra.

Zygæna halterata, Fabr. Sp. Ins. ii. 165, 45; Mant. Ins. ii. 106, 55; Ent. Syst. iii. 1, 404, 60.

Sphinx Zygæna halterata, *Gmel. ed. Syst. Nat. i. 5, 2398, 148.*
Brazil.

106. GLAUCOPIS MELISSA.

Alæ atræ, disco hyalinæ; abdomen nigrum, lineis tribus auris, ano fulvo.

Sphinx Melissa, *Fabr. Sp. Ins. ii. 162, 25; Mant. Ins. ii. 104, 31;*
Ent. Syst. iii. 396, 33.

Sphinx Zygæna Melissa, *Gmel. ed. Syst. Nat. i. 5, 2396, 133.*
America.

107. GLAUCOPIS FLAVOCINCTA.

Nigra; caput sub antennis albo bilineatum; thoracis et abdominis latera albo guttata; thorax maculis duabus lateralibus albis duabusque intermediis anticis viridibus; abdomen cyaneo trivittatum, basi flavum, apice fulvum; alæ hyalinæ; antica fascia discali margineque lata nigris; coxæ albo guttatae.

Glaucopis flavocincta, *Gutr. Icon. Règne Anim. Ins. Texte, 50.*
Cayenne.

108. GLAUCOPIS MYRTEA.

Atra; alæ hyalinæ, margine omni nigro; abdomen sanguineum, linea dorsali cingulisque atris.

Sphinx Myrtea, *Fabr. Sp. Ins. ii. 161, 19; Mant. Ins. ii. 103, 23;*
Ent. Syst. iii. 393, 25.

Sphinx Zygæna Myrtea, *Gmel. ed. Syst. Nat. i. 5, 2395, 125.*
Brazil.

109. GLAUCOPIS NIGRICORNIS.

Alæ hyalinæ, margine nigro; corpus flavum, basi apiceque atrum cyaneo maculatum.

Sphinx nigricornis, *Fabr. Mant. Ins. ii. 104, 30; Ent. Syst. iii. 395, 32.*

Sphinx Zygæna nigricornis, *Gmel. ed. Syst. Nat. i. 5, 2396, 132.*
Cayenne.

110. GLAUCOPIS POSTFLAVA.

Nigra, flavo maculata et lineata, subtus ochraceum; abdomen rufo bivittatum, apice nigrum; alæ limpidæ, apice nigræ.

Glaucopis postflava, Guér. Icon. Règne Anim. Ins. Texte, 501.

Bolivia.

Genus 8. EUCHROMIA.

Corpus subcylindricum, sublineare, plerumque gracile. Palpi longitudine mediocres. Antennæ, maris saltem, sæpissime pectinatæ, fœminæ nonnunquam subpectinatæ aut serratæ. Abdomen cylindricum. Alæ omnino opacæ, aut maculis tantum hyalinis, plus minusve angustæ et elongatæ.

Euchromia, &c., *Hübner. Verz. Schmett.*

Glaucopis, p., *Latr.*; *Boisd.*; *Guér.*

Charidea, p., *Dalm.*

Synopsis of the Species in the British Museum:—

- | | |
|---|-------------------|
| a. Discal areolet not narrow. | |
| b. Antennæ not pectinated nor plumose. | |
| c. Wings with gilded spots. | <i>Hyparchus.</i> |
| cc. Wings with orange spots. | <i>vicaria.</i> |
| bb. Antennæ of the male pectinated or plumose. | |
| c. General structure like that of <i>Syntomis</i> . | |
| d. Antennæ more or less pectinated. | |
| e. Abdomen not tufted along each side. | |
| f. Palpi not porrect. | |
| g. Body and wings more or less metallic. | |
| h. Hind legs not ciliated. | |
| i. Hind wings rounded or hardly angular. | |
| j. Body very hairy. | |
| k. Colour hardly metallic. | <i>hirsuta.</i> |
| kk. Colour bright metallic. | |
| l. Wings with limpid spots. | <i>ignita.</i> |
| ll. Wings unspotted. | <i>opulenta.</i> |
| jj. Body hardly hairy. | |
| k. Wings red, unspotted. | |
| l. Wings bright red. | <i>Lichas.</i> |

- ll. Fore wings dull purplish red. Pugione.
 kk. Wings very generally spotted, or wholly blackish with blue or green reflections.
 l. Body rather long and narrow. Antennæ pectinated but not to the tips. Fore wings rather long and narrow. Eutomis. Eryx.
 ll. Allied to the Lithosiidæ in structure. Antennæ pectinated to the tips. Wings broad. Abdomen rather short, extending very little beyond the hind border of the hind wings.
 m. Abdomen with metallic bands.
 n. Hind border of the hind wings unspotted. submacula.
 nn. Hind border of the hind wings partly red. arrogans.
 mm. Abdomen wholly metallic.
 n. Hind wings partly red. fastuosa.
 nn. Hind wings without red.
 o. Fore wings with a red stripe. gloriosa.
 oo. Fore wings with a red stripe and a red band. jucunda.
 lll. Body longer than in the preceding group. Abdomen extending to some distance beyond the hind wings. Wings more ample than in the following group, and generally speaking less spotted. Euchromia, p.
 m. Wings with red spots.
 n. Hind wings without yellow.
 o. Abdomen without bands. Proserpina.
 oo. Abdomen with yellow bands. Cepheus.
 nn. Hind wings yellow at the base. bellatrix.
 mm. Wings without red. albiplaga.
 llll. Body narrow, cylindrical. Wings long and narrow, covered with opaque or limpid spots. Abdomen long, extending for half its length beyond the hind wings. Resembles Syntomis.
 m. Wings with luteous or yellow spots.
 n. Fore wings marked with blue in the disk.
 o. Abdomen with red bands. Polymena.
 oo. Abdomen with orange bands.
 p. Abdomen with a white band.
 pp. Abdomen with no white bands. Sperchius.
 nn. Fore wings not marked with blue. Lethe.
 o. Abdomen with metallic bands or spots.

- p. Abdomen with an orange band. interstans.
 pp. Abdomen with no orange band. semiaurata.
 oo. Abdomen not metallic.
 p. Abdomen with two bands. Madagascariensis.
 pp. Abdomen with many bands.
 q. Fore wings with several spots. melanthus.
 qq. Fore wings with one spot. ferox.
 ppp. Abdomen without bands. apricans.
 mm. Wings with white or limpid spots.
 n. Fore wings with red marks.
 o. Hind wings with a white disk. Meones.
 oo. Hind wings with a white hind border. diversipennis.
 nn. Fore wings without red marks.
 o. Abdomen with red bands. Irus.
 oo. Abdomen with a red tip. Epilais.
 ooo. Abdomen without red.
 p. Hind wings with two or more spots.
 q. Fore wings with six white spots. Vulcanus.
 qq. Fore wings with three white spots. subcyanea.
 pp. Hind wings with a limpid disk. diminuta.
 llll. Like the preceding group in structure, but the body is black, with white and golden green stripes; the wings are black with white tips. terminalis.
 lllll. Body cylindrical, long, very narrow. Antennæ pectinated. Wings wholly opaque, very narrow; hind border of the hind wings hardly extending beyond the base of the abdomen.
 m. Body partly metallic. Tina.
 mm. Body not metallic. neglecta.
 llllll. Very nearly allied to Group llll. General colour black, with golden green stripes or rows of spots. Antennæ pectinated. Wings black, opaque, rarely with limpid spots.
 m. Thorax not red or tawny.
 u. Wings with limpid spots.
 o. Legs not white. Phlegmon.
 oo. Legs partly white. varipes.
 nu. Wings with no white spots.
 o. Thorax without white dots.
 p. Abdomen with red spots at the base. Cassandra.
 pp. Abdomen with no red.

- | | | |
|----------|--|---------------|
| q. | Wings black. | |
| r. | Abdomen with golden green bands. | |
| s. | Fore wings with a bright green stripe. | Helymus. |
| ss. | Fore wings hardly green at the base. | tropica. |
| sss. | Fore wings wholly tinged with green. | scutellaris. |
| ssss. | Fore wings without metallic lustre. | dolosa. |
| rr. | Abdomen not metallic. | |
| s. | Hind wings metallic. | cryptoleucus. |
| ss. | Hind wings not metallic. | |
| t. | Wings deep black. | |
| v. | Fore wings not paler towards the tips. | mystica. |
| vv. | Fore wings paler towards the tips. | tenebrosa. |
| tt. | Fore wings purplish black. | invaria. |
| ttt. | Wings dark brownish cupreous. | fumipennis. |
| tttt. | Wings purple. | regalis. |
| ttttt. | Fore wings with a white band near the tip. | aliena. |
| oo. | Thorax with white dots. | leucosticta. |
| mm. | Thorax red or tawny. | |
| n. | Thorax with white dots. | thoracia. |
| o. | Wings not metallic. | concisa. |
| oo. | Wings metallic. | incerta. |
| lllllll. | Very like the preceding group, but the body and the wings are generally shorter and broader. | |
| m. | Body without pale marks. | |
| n. | Fore wings with a little yellow dot. | Heber. |
| nn. | Fore wings with a large limpid spot. | finalis. |
| mm. | Thorax with red dots. | quadrigutta. |
| mmm. | Thorax with luteous marks in front. | flavigutta. |
| mmmm. | Thorax and abdomen partly luteous. | connexa. |
| ii. | Hind wings distinctly angular. | Phemonoe. |
| hh. | Hind legs ciliated, at least in the male. | |
| j. | Hind tarsi not pale. | |
| k. | Tips of hind tarsi fringed with white hairs. | |
| l. | Abdomen wholly metallic. | Maja. |
| ll. | Abdomen with metallic stripes. | vittata. |
| kk. | Hind tarsi with no white hairs. | |
| l. | Thorax with white dots. | aurata. |
| ll. | Thorax with no white dots. | Æacus. |
| jj. | Hind tarsi pale. | |
| k. | Wings wholly opaque. | auripes. |
| kk. | Wings partly limpid at the base. | basalis. |
| gg. | Body and wings with no metallic lustre. | |
| h. | Hind tibiæ ciliated. | |

- | | |
|---|--------------|
| i. Colour black. | plumipes. |
| ii. Colour pale. | Pretus. |
| hh. Hind tibiæ not ciliated. | |
| i. Antennæ distinctly pectinated. | |
| j. Antennæ not pectinated to the tips. | anthracina. |
| jj. Antennæ pectinated to the tips. | |
| k. Fore wings without hyaline spots. | pectinata. |
| kk. Fore wings with hyaline spots. | instructa. |
| ii. Antennæ hardly pectinated. | bicolor. |
| ff. Palpi porrect. | lycoïdes. |
| ee. Abdomen tufted along each side. | flammans. |
| dd. Antennæ plumose. | |
| e. Abdomen red above. | contenta. |
| ee. Abdomen with a red tip. | Achæron ? |
| cc. General structure like that of the Bombycidæ. | |
| d. Body partly metallic. | |
| e. Wings orange. | contraria. |
| ee. Wings brown with luteous or testaceous marks. | |
| f. Fore wings with two luteous spots. | opposita. |
| ff. Fore wings with two luteous stripes. | Sypilus. |
| fff. Fore wings with one luteous stripe. | Spingidea. |
| ffff. Fore wings with one testaceous band. | apicalis. |
| fffff. Fore wings brown with white tips. | |
| g. Thorax striped. | Capys ? |
| gg. Thorax not striped. | |
| h. Hind wings fringed with white. | Thoas ? |
| hh. Hind wings not fringed with white. | Thetis ? |
| eee. Wings black. | Styx. |
| eeee. Wings dark blue. | diptera. |
| dd. Body not metallic. | |
| f. Wings with various shades of brown and white or fawn colour. | |
| g. Hind wings not blue. | |
| h. Abdomen partly brown or black. | |
| i. Abdomen black with a red tip. | subplena. |
| ii. Abdomen more or less pale in the middle. | |
| j. Hind wings quite limpid towards the base. | |
| k. Abdomen with an orange band. | varia. |
| kk. Abdomen with a red band. | Archias. |
| jj. Hind wings not or hardly limpid towards the base. | |
| k. Fore wings with two quadrate hyaline spots. | tetragramma. |

kk. Fore wings without cuneiform marks.	Marica?
kkk. Fore wings with cuneiform marks.	
1. Pencilling of the fore wings hardly minute.	sylvius.
11. Pencilling of the fore wings very minute.	Pilatei.
hh. Abdomen wholly red.	
i. Hind wings and part of the fore wings whitish.	Rosina.
ii. Fore wings and hind wings almost wholly brown.	Rosa.
gg. Hind wings mostly blue.	grylloides.
ff. Wings black or blackish brown.	
g. Wings with a white costal stripe.	bombycina.
gg. Wings with luteous bands.	semiluna.
ggg. Wings with white stripes.	strigosa.
aa. Discal areolet very narrow.	calcarata.

Group 1. POMPOSTOLA.

Color metallicus, micans. Antennæ setacæ, corpore vix breviores, in utroque sexu simplices. Abdomen sublineare, non petiolatum. Alæ anticæ longæ, angustæ, omnino opacæ et squamosæ, maculis viridibus et auratis; posticæ non angulatæ. Pedes graciles; tibie posticæ calcaribus longissimis, maris plumosæ.

Pompostola p., Hübn. Verz. Schmett. 120.

Body and wings brilliantly metallic. Antennæ setaceous, nearly as long as the body, not pectinated in the male. Wings long, narrow, wholly opaque and squamose, adorned with green and gilded spots. Hind wings not angular. Abdomen nearly linear, not petiolated. Legs slender. Hind tibie with very long spurs, plumose in the male.

South America and West Africa.

This group differs from most of the following sections in not having pectinated antennæ.

1. EUCHROMIA HYPARCHUS.

Nigra, viridi maculata; alæ anticæ maculis tribus, posticæ una aureis.

Zygæna Hyparchus, *Fabr. Sp. Ins.* ii. 160, 17; *Mant. Ins.* ii. 103, 21; *Ent. Syst.* iii. 1, 393, 23.

Sphinx adscita Hyparchus, *Cram. Pap. Exot.* iii. 7, pl. 197, f. C.

Sphinx Zygæna Hyparchus, *Gmel. ed. Syst. Nat.* i. 5, 2395, 123.

Pompostola Hyparchus, *Hübner. Verz. Schmett.* 120, 1304.

a, b. Sierra Leone. Presented by the Rev. D. F. Morgan.

c. Ashanti. From the Wesleyan Missionary Society's collection.

Var.? *Alæ virescenti-atræ maculis aureis, posticæ violaceæ basi aureæ.*

Zygæna Argynnis, *Fabr. Sp. Ins.* ii. 161, 19; *Mant. Ins.* ii. 103, 23; *Ent. Syst.* iii. 393, 24.

Sphinx Zygæna Argynnis, *Gmel. ed. Syst. Nat.* i. 5, 2395, 124.

Brazil?

2. EUCHROMIA VICARIA.

Aureo-viridis, palpis, antennis pedibusque nigris; alæ nigro-purpureæ; anticæ macula una basali alteraque transversa aurantiacis; posticæ basi oblique aurantiacis; coxæ anticæ subtus albæ; tibiæ posticæ extus albo maculatæ.

Golden green. Palpi, antennæ and legs black. Wings blackish purple. Fore wings with an elongated orange spot near the base, and a transverse one beyond the middle. Hind wings obliquely orange towards the base. Fore coxæ white on one side; hind tibiæ with an elongated white spot on the outer side. Length of the body $5\frac{1}{2}$ lines; of the wings 18 lines.

a. ———? Presented by E. Doubleday, Esq.

b. Ashanti. From the Wesleyan Missionary Society.

3. EUCHROMIA SEMIAURATA.

Nigra; caput, thoracis vitta dorsalis et latera, abdominis fasciæ, et coxæ cyanea aut viridia aut aurata; alæ nigro-purpureæ; anticæ maculis duabus luteis, una longitudinali basali, altera transversa discali; posticæ luteo bimaculatæ.

Black. Head, dorsal stripe and sides of the thorax, and bands of the abdomen and coxæ glittering blue which appears green or gilded in some directions. Wings blackish purple. Fore wings

with a longitudinal luteous spot at the base, and in the disk with a transverse one which is dilated hindward. Hind wings with two luteous spots at the base; fore one extending along half the length of the wing; hind one short. Length of the body 7 lines; of the wings 20 lines.

a. ———? Presented by E. Doubleday, Esq.

Group 2. ENOPE.

Corpus breve, crassum, hirsutissimum. Palpi sat longi; articulus 2us elongatus, gracilis, acuminatus, li longitudine. Antennæ maris late pectinatæ. Alæ anticæ apud discos plerumque hyalinæ, apice rotundatæ, non angulatæ nec acuminatæ. Pedes validi; tibie posticæ calcaribus parvis.

Body short, thick, very hairy. Palpi rather long; second joint long, slender, acuminate, as long as the first. Antennæ of the male rather deeply pectinated. Wings mostly hyaline in the disks, rounded and not angular or pointed at the tips. Legs rather stout; spurs of the tibie small. A link connecting *Euchromia* with *Glaucopis*.

4. EUCHROMIA HIRSUTA.

Mas. *Nigra*; antennæ sat late pectinatæ, apice albæ; alæ nigro-virides apice albæ; anticæ striga basali albida vittaque lutea hyalina; posticæ vittis duabus hyalinis una lutea altera alba; tibie tarsique subtus albo-pilosa.

Male. Black, with black hairs. Antennæ tolerably deeply pectinated, white above towards the tips. Wings blackish green, with white tips. Fore wings with a short whitish streak at the base, and with a broad, irregular, hyaline luteous stripe which occupies most of the disk, and is more or less interrupted by the veins. Hind wings with a less interrupted luteous hyaline stripe which widens from the base and is connected behind with a short narrow hyaline white stripe. Tibie and tarsi with white hairs beneath. Length of the body 8 lines; of the wings 24 lines.

a. ———? From M. Becker's collection.

Group 3. CHRYSOCALÉ.

Corpus robustum, hirsutum. Palpi mediocres; articulus 2us 1o vix brevior. Antennæ maris late pectinatæ, fœminæ subpecti-

natæ. Alæ amplæ, opacæ; anticæ auratæ, nonnunquam maculis una duabusve parvis limpidis. Pedes validi; tibix calcaribus sat longis.

Chrysocale, MSS.

Distinguished by the stout hairy body, the deeply pectinated antennæ of the male, the ample opaque wings, of which the fore pair are gilded, and sometimes contain one or two small limpid spots.

In the form of the wings it has most resemblance to *Glaucopsis*.

Body thick, short, thickly clothed with hairs. Palpi moderately long; second joint nearly as long as the first. Antennæ of the male more or less deeply pectinated, of the female very slightly pectinated. Fore wings long, golden, occasionally with limpid spots; their tips slightly angular and pointed. Hind wings darker, slightly pointed at the tips, slightly sinuated on the hind border. Legs rather stout; median and apical spurs of the tibix rather long.

South America.

5. EUCHROMIA IGNITA.

Mas. *Nigra; antennæ pectinatæ, cyaneo-virides; thorax anticæ lateribusque aureo-virides; abdomen viridi-cyaneo trivittatum; alæ anticæ aureo-virides fascia cyanea maculisque duabus limpidis, posticæ purpureo-cyaneæ; pedes cyaneo-squamosi.*

Chrysocale ignita, MSS.

Black, with black hairs. Antennæ bluish green, moderately pectinated. Thorax with dark green hairs, golden green in front and on each side. Wings beneath blackish brown, each with two blue stripes proceeding from the base, and near the tip with a golden green spot which has a cupreous disk in the fore wings. Fore wings golden green, blackish green along most of the border; two limpid spots near the fore border; space between them and a band from the first to the hind border deep blue, this colour forms a right angle and half encloses a large purple spot. Hind wings dark purplish blue. Abdomen with three greenish blue stripes. Legs, excepting the tarsi, with blue scales. Length of the body 7—8 lines; of the wings 22—24 lines.

a. Santa Fé de Bogota. From Mr. Isaacson's collection.

b. Colombia. From M. Becker's collection.

6. EUCHROMIA OPULENTA.

Nigra, aureo-viridi squamosa; caput albo bimaculatum; antennæ maris latissime pectinatæ, fœminæ subpectinatæ; abdomen aureo-viridi trivittatum, subtus e maculis albis bivittatum; alæ anticæ aureo-virides macula discali cyanea, posticæ cyaneo-virides subtus aureo-virides.

Black, with black hairs. Head, palpi, antennæ, thorax and legs with golden green scales. Head with two white spots in front. Antennæ of the male very deeply, of the female very slightly, pectinated. Fore wings golden green; upper side with a more or less rectangular deep blue mark in the disk before the middle. Hind wings dark bluish green, black in some aspects, golden green beneath. Abdomen with three golden green stripes; under side with two rows of white spots. Length of the body 7—8 lines; of the wings 22—24 lines.

a—c. Venezuela. From Mr. Dyson's collection.

d. ——— ?

7. EUCHROMIA REGALIS.

Glaucopis regalis, Boisd. Spec. Gén. Lép. i. pl. 16, f. 3.

Group 4. EMPYREUMA.

Corpus metallicum, immaculatum. Antennæ sat late pectinatæ. Abdomen sublineare. Alæ longæ, opacæ, squamosæ, immaculatæ, non metallicæ; posticæ non angulatæ. Pedes validi, non plumosi; tibiarum calcares breves.

Empyreuma, Hübn. Verz. Schmett. 120.

Differs from the preceding group by the longer, and spotted, and less hairy body, by the less deeply pectinated antennæ, and by less ample, and wholly opaque and unspotted wings.

Body metallic. Antennæ setaceous, much more than half the length of the body, thickly and rather deeply pectinated to the tips. Wings long, moderately broad, wholly opaque and squamose, not spotted. Hind wings not angular. Abdomen nearly linear, not petiolated. Legs stout, not plumose. Tibiæ with short spurs. This group approaches nearest to *Zygæna* in its form, and in the colour of its wings.

South America.

8. EUCHROMIA LICHAS.

Nigra, viridi-micans; alæ rufæ striga media viridi punctoque albo; abdomen atrum, cingulis duabus aureis.

Zygæna Lichas, Fabr. Sp. Ins. ii. 505; Mant. Ins. ii. 104, 34; Ent. Syst. iii. 1, 397, 36.

Sphinx Zygæna Lichas, Gmel. ed. Syst. Nat. i. 5, 2394, 121.

Empyreuma Lichas, Hübn. Verz. Schmett. 120, 1297.

Eupyreuma Pugione, Hübn. Verz. Schmett. 120, 1298; Samml. Exot. Schmett. 12, 21, f. 41, 42.

a. Cuba. Presented by Mcons. Sommer.

b. St. Domingo. From Mr. Cuming's collection.

9. EUCHROMIA PUGIONE.

Nigro-cyanea; antennæ apice fulvæ; abdomen cyaneum, aut viride, fasciis duabus interruptis albis; alæ anticæ rufo-purpureæ apice nigro-purpureæ; posticæ rufæ nigro marginatæ.

Sphinx Pugione, Linn. Syst. Nat. Fabr. Sp. Ins. ii. 163, 33; Mant. Ins. ii. 105, 40.

Sphinx adscita Lichas, Cram. Pap. Exot. iv. pl. 45, f. B.

Sphinx Zygæna Pugione, Gmel. ed. Syst. Nat. i. 5, 2397, 45.

a, b. South America.

Group 5. BELEMNIA.

Corpus sat longum et angustum, metallicum. Antennæ maris sat late pectinatæ. Alæ longæ; anticæ opacæ, metallicæ, micantes, maculatæ; posticæ margine interno angulatæ. Pedes graciles, non plumosi. Tibiarum calcares breves.

Body rather long and narrow. Body and wings brilliantly metallic. Antennæ setaceous, much more than half the length of the body, thickly and rather deeply pectinated to full three-fourths of the length in the male. Fore wings long, moderately broad, opaque and squamose, with red or yellow semi-hyaline spots towards the tips, Hind wings angular on the hind border near the base. Abdomen nearly linear, not petiolated. Legs slender, not plumose. Tibiæ with short spurs. Nearly allied to the group *Chrysocale*.

South America.

10. EUCHEOMIA ERYX.

Alæ atræ, anticæ basi aurææ, macula media abdomineque subtus sanguineis.

Sphinx Eryx, *Fabr. Sp. Ins.* ii. 161, 22; *Mant. Ins.* ii. 104, 27; *Ent. Syst.* iii. 1, 394, 29.

Sphinx inaurata, *Sulz. Hist. Ins.* 151, pl. 20, f. 4. *Cram. Pap.* iii. 67, pl. 140, f. E, F.

Sphinx Zygæna inaurata, *Gmel. ed. Syst. Nat.* i. 5, 2395, 129.

Pompostola Eryx, *Hüb. Verz. Schmett.* 120, 1302.

In this species the following varieties of colour occur:—

Var. a. Head and thorax with gilded or golden green spots. Fore wings gilded towards the base, with a red spot in the disk. Abdomen with a cupreous stripe, bright green towards the base and bright blue towards the tip on each side.

Var. β. Like *Var. a.* Abdomen with gilded green spots on each side along the whole length.

Var. γ. Spots on the fore wings yellow. Red beneath the abdomen extending partly over the sides above on the hinder half.

a. St. Catherine, Brazil. From M. Becker's collection.

b. Pará. From Mr. Bates' collection.

c—e. Honduras. From Mr. Miller's collection.

f. Brazil. From Mr. Miller's collection.

Group 6. DIOSPAGE.

Corpus sat validum, metallicum. Palpi subelongati; articulus 3us minimus. Antennæ extrorsum crassiores, apices versus attenuatæ. Alæ anticæ longæ, angustæ, maculatæ. Pedes sat validi; tibiæ calcares longissimi.

Pompostola p., *Hüb. Verz. Schmett.* 120.

Body moderately stout, metallic. Palpi rather long; third joint very small. Antennæ thickest at three-fourths of the length, slightly tapering from thence to the tips. Wings long, narrow, spotted. Legs moderately stout; spurs of the tibiæ very long.

11. EUCHROMIA RHEBUS.

Nigra; caput, thorax et abdominis latera basi ad medium cyaneo aureoque maculata; antennæ subpectinatæ; alæ anticæ fascia basali latissima aurata, maculisque duabus post-mediis limpidis; posticæ cyaneæ strigis aureis marginibus latissimis nigris.

Sphinx adscita Rhebus, Cram. Pap. Exot. iii. 72, pl. 234, f. F.
Pompostola Rhebus, Hübn. Verz. Schmett. 120, 1303.

East Indies and Africa.

12. EUCHROMIA AURATA.

Nigra; antennæ late pectinatæ; thorax cyaneo bifasciatus; abdomen auratum nigro unifasciatum; alæ anticæ æneo pulverulentæ, basi strigaeque transversa ante-media aureis, gutta discali post-media limpida.

Sphinx adscita auratus, Cram. Pap. Exot. iii. 126, pl. 264, f. A.
Pompostola auratus, Hübn. Verz. Schmett. 120, 1305.

Coromandel.

Group 7. AUTOMOLIS.

Corpus plus minusve metallicum. Palpi articulo 3o minimo. Antennæ usque ad apices pectinatæ. Abdomen pone alas posticas terminatum. Alæ latæ, opacæ; anticæ plus minusve maculatæ, basi metallicæ. Tibiæ anticæ subtus dentatæ; posteriores calcarius parvis.

Automolis, MSS.

Approaches the *Lithosiidæ* in structure. Body more or less metallic. Third joint of the palpi very short. Antennæ pectinated to the tips. Wings broad, opaque, more or less spotted, metallic at the base. Abdomen rather short, extending very little beyond the hind wings. Fore tibiæ dentate beneath; middle and apical spurs of the hind tibiæ small.

13. EUCHROMIA SUBMACULA.

Nigro-fusca; caput, thoracis vittæ tres et pars antica abdominisque segmentorum margines postici viridia; antennæ subpectinatae; alæ basi et apud margines virides; anticæ rufo flavoque trino-tatæ; posticæ rufo trimaculatæ; femora viridi varia; coxæ et femora antica subtus alba.

Dark brown. Antennæ slightly pectinated to the tips. Head mostly, thorax in front and three dorsal stripes metallic green. Wings bright green at the base and along part of the borders. Fore wings with a slight red streak in front, with a red and yellow stripe extending from the base to the disk and parallel to the hind border, and with a very broad yellow partly red-bordered band near the tip. Hind wings with three red spots which are much larger and more distinct beneath than above. Abdomen with green bands on the hind borders of the segments. Femora partly green; fore coxæ and fore femora white beneath. Length of the body 6—8 lines; of the wings 22—25 lines.

a—e. Venezuela. From Mr. Dyson's collection.

14. EUCHROMIA ARBOGANS.

Nigra; caput, thoracis vittæ quatuor, pectus et abdominis segmen-torum margines postici cyanea; abdomen subtus e maculis cyaneis bivittatum; alæ nigro-fusæ; anticæ luteo trinotatæ basique cyaneo binotatæ; posticæ rufo fasciatæ basi subpurpu-reæ; femora et tibiæ ad partem cyaneo-squamosa.

Black. Head, thorax beneath, four stripes above and hind borders of the abdominal segments blue. Wings blackish brown. Fore wings with two blue marks at the base near which there is a fusiform luteous streak; beyond it and nearer the fore border a sub-quadrate luteous spot, and towards the tip a very broad slightly oblique luteous band which does not extend to the borders. Hind wings tinged with purple towards the base, with a broad red stripe along the middle part of the hind border. Abdomen with two rows of blue spots beneath. Palpi, femora and tibiæ partly covered with blue scales. Length of the body 7 lines; of the wings 22 lines.

a. Venezuela. From M. Becker's collection.

15. EUCHROMIA FASTUOSA.

Nigra; caput, thoracis vittæ tres et pars antica viridia; antennæ subpectinatae; alæ anticæ nigro-fuscae rufo bimaculatæ basi aureo virides; posticæ purpureo-cyanæ rufo vittatæ; femora et tibiæ aureo-viridia, coxæ tibiæque anticæ subtus albæ.

Black. Head, palpi, thorax in front and three dorsal stripes bright green. Antennæ minutely pectinated beneath to the tips. Fore wings dark brown, golden green at the base, and with two bright red spots, one near the base, the other in the middle near the fore border, the last also appears beneath where there is another spot beyond it. Hind wings deep purplish blue, bright red along the middle part of the hind border, this red stripe widens in breadth towards the tip of the wing. Femora and tibiæ mostly golden green; fore coxæ and fore tibiæ white on one side. Length of the body 5—6 lines; of the wings 18—20 lines.

a, b. Jamaica. From Mr. Children's collection.

c—f. Brazil. From Mr. Mornay's collection.

Var. The second spot on the under side of the fore wing appearing also above.

g, h. Venezuela. From Mr. Dyson's collection.

16. EUCHROMIA GLORIOSA.

Nigra; caput, thoracis vittæ tres et pars antica cyaneo-viridia; abdominis segmentorum margines postici virides; alæ anticæ rufo vittatæ basi virides, posticæ basi purpureo-cyanæ; femora et tibiæ viridi-squamosa.

Black. Head mostly, fore part of thorax, and three dorsal stripes bluish green. Fore wings bright green at the base and with a broad bright red stripe which begins at the base near the fore border, and is thence very slightly inclined to the hind border which it approaches near the tip of the wing. Hind wings purplish blue at the base. Hind borders of the abdominal segments bright green. Femora and tibiæ partly covered with bluish green scales. Length of the body 5½—6 lines; of the wings 18—19 lines.

a, b. Guatemala. From M. Sallé's collection.

17. EUCHROMIA BELLA.

Violaceo-cyanea, micans; antennæ nigrae; alæ nigrae; antica vitta basali maculaque discali flavidis vittaque postica basali cyanea; postica basi cyanescentes.

Glaucoptis bella, Guér. *Icon. Règne Anim. Ins. Texte*, 502.
Orizaba, Mexico.

18. EUCHROMIA JUCUNDA.

Nigra; caput, thoracis vittæ tres et pars antica necnon abdomen cyanea; alæ anticae rufo univittatæ et unifasciatæ basi cyaneo bistrigatæ; postica dimidio basali cyaneo.

Black. Head, fore part of the thorax, three dorsal stripes and abdomen bright metallic blue or greenish blue. Fore wings with two greenish blue streaks at the base, near which commences a bright red stripe extending parallel and near to the hind border to a little beyond the middle; beyond it is a broad oblique deep red band which does not extend to the borders and is widest towards the hind part. Hind wings bright blue above for half the length from the base. Length of the body 5—5½ lines; of the wings 16—17 lines.

- a. Rio Janeiro. Presented by J. P. G. Smith, Esq.
- b. Guatemala. From M. Sallé's collection.
- c. Brazil. From M. Becker's collection.
- d, e. ———? From Mr. Children's collection.

Group 8. HISTICEA.

Color ad partem metallicus. Corpus lineare, sat validum. Palpi longi, articulo 3o elongato. Antennæ usque ad apices pectinatæ. Alæ longæ, opacæ, sat latæ; anticæ maculatæ; posticæ non angulatæ. Pedes validiusculi, subelongati; tibiæ posteriores calcaribus longis.

Euchromia p., Hübn. *Verz. Schmett.* 121.

Colour partly metallic. Body linear, rather stout. Palpi long; second joint elongated. Antennæ pectinated to the tips. Wings long, rather broad, spotted, not hyaline. Hind wings not angular. Legs rather stout and long; middle and apical spurs of hind tibiæ long. Resembles *Syntomis*.

In structure between Group 6 and Group 8. The body is longer than in Group 5, and the abdomen extends to some distance beyond the hind wings, but the wings are more ample than in Group 7, and as a general character less spotted.

19. EUCHROMIA PROSERPINA.

Nigra; caput, thorax, pectus et abdominis latera cyaneo guttata; alæ anticæ guttis duabus basalibus duabusque discalibus anticis cyaneis, fascia lata ante apicali flavâ, dimidioque basali rufo strigata; alæ posticæ rufo bimaculatæ.

Euchromia Proserpina, Hübn. Verz. Schmett. 121, 1312. Samml. Exot. Schmett. 10, 111, f. 221, 222.

Var. β . Blue dots in the disk of the fore wing connected.

Var. γ . Two additional red streaks in the disk of the fore wing.

Var. δ . No small yellow spot on the fore wing.

a. Brazil. From Mr. Stevens' collection.

b. Amazon River. From Mr. Bates' collection.

c, d. ——— ? From Mr. Milne's collection.

20. EUCHROMIA BELLATRIX.

Nigro-fusca; caput nigrum, cyaneo quadriguttatum; thorax flavo bimaculatus; abdomen e guttis cyaneis bivittatum, basi subtusque flavum; alæ anticæ cyaneo triguttatæ rufo tri- aut quad-rivittatæ flavoque nonnunquam interrupte fasciatæ; posticæ apud marginem posticum basalem flavæ, macula discali vittaque rufis; tarsi subtus apice testacei.

Glaucopis bellatrix, MSS.

Head black, with two blue dots in front and two behind. Palpi and antennæ black. Thorax blackish brown, with two blue dots in front, one behind, and one on the hinder part on each side beneath; a large yellow spot on each shoulder. Wings blackish brown. Fore wings with a blue dot at the base, and two in the disk; three red stripes extending from the base; first and second straight, along each border; third in the disk, curved towards the hind border; a yellow spot before, and an abbreviated yellow band beyond, the blue dots in the disk; a yellow streak between the first and second red stripes near the base. Hind wings yellow on the hind border by the base and with a broad red stripe which extends from the base

and is connected with a large red spot in the disk. Abdomen blackish brown, with a broad yellow band at the base, and with a row of blue dots along each side; under side yellow except near the tip. Legs blackish brown; tarsi testaceous beneath at the tips. Length of the body 8—10 lines; of the wings 25—32 lines.

Var. . Yellow band on the fore wings forming four yellow spots; four red stripes, the costal one extending nearly to the tip.

Var. γ. Yellow band on the fore wings forming three spots.

a—c. Venezuela. From Mr. Dyson's collection.

d, e. Venezuela. From M. Becker's collection.

21. EUCHROMIA ALBIPLAGA.

Nigra; caput, thoracis vittæ tres dorsales et pars antica, abdominisque vittæ tres e maculis cyaneo-viridia; palpi subtus albi; antennæ supra cyaneæ, basi albæ; abdomen subtus albo fasciatum; alæ apice albæ maculis subtus cyaneis aut viridibus; anticæ cyaneo bivittatæ; posticæ albo marginatæ.

Black. Head, fore part of thorax, three dorsal stripes, and three rows of spots on the abdomen brilliant blue-green. Palpi white beneath. Antennæ blue above, white at the base. Abdomen with a broad white stripe beneath. Legs mostly white beneath. Wings with white tips; under side with blue or green spots. Fore wings with two blue stripes which extend from the base to the middle, the front one interrupted. Hind wings with a white hind border. Length of the body 5—6 lines; of the wings 18—20 lines.

Var. . Fore stripe of the wings obsolete except at the base and at the tip.

a. ———? Presented by the Entomological Club.

b. ———? Presented by E. Doubleday, Esq.

c, d. Venezuela. From Mr. Dyson's collection.

e. Brazil. From Mr. Mornay's collection.

Group 8. PHALANNA.

Corpus angustum, cylindricum. Antennæ plus minusve pectinatae. Abdomen post alas posticas longe productum. Alæ longæ, angustæ, maculis opacis aut limpidis. Pedes sat longi; tibiæ anticæ non dentatæ; posteriores tibiis parvisculis.

Euchromia p., Hübn. Verz. Schmett. 121.

The body is narrow and cylindrical, the antennæ are more or less pectinated; the wings are long and narrow, and are more or less covered with opaque or limpid spots. Abdomen long, extending for half its length beyond the hind wings. Legs rather long; fore tibiæ not dentate; middle and apical spurs of the hind tibiæ rather small.

22. EUCHROMIA POLYMENA.

Nigra; alæ maculis luteis, anticæ tribus, posticæ duabus; abdomen cingulis binis coccineis.

Sphinx Polymena, Linn. *Syst. Nat.* ii. 806, 40.

Zygæna Polymena, Fabr. *Sp. Ins.* ii. 162, 26; *Mant. Ins.* ii. 104, 32; *Ent. Syst.* iii. 1, 396, 34.

—— — *Rai Ins.* 135. *Drury, Ins.* i. pl. 26, f. 1.

Sphinx adscita Polymena, Cram. *Pap. Exot.* ii. pl. 31, f. D.

Sphinx Zygæna Polymena, Gmel. *ed. Syst. Nat.* i. 5, 2394, 40.

Euchromia Polymena, Hübn. *Verz. Schmett.* 121, 1308.

Glaucopis Polymena, Westw. *ed. Drury*, i. 50, pl. 26, f. 1.

China.

Var. β. Basal spots of the wings very small.

Var. γ. Band on the middle of the abdomen occupying three segments.

Var. δ. Fore part of the thorax and bands of the abdomen luteous.

a. Ceylon. From the Rev. J. Wenham's collection.

b. Penang. Presented by Sir W. Norris.

c. Malabar. Presented by S. N. Ward, Esq.

d—g. North India. From Mr. L. James' collection.

h. East Indies. From Mr. Milne's collection.

i. North India. From Mr. Stevens' collection.

j. East Indies. From Archdeacon Clarke's collection.

k. East Indies. From Mr. Argent's collection.

l. Ceylon.

23. EUCHROMIA HISTRIO.

Nigra ; caput et thorax cyaneo et albo maculata ; antennæ longæ, late pectinatæ, apice flavescences ; thorax rufo bilineatus et bimaculatus ; abdomen vitta maculari alba, segmentis tribus basalibus rufis, subtus albo varium ; alæ anticæ macula parva flavescente alteraque cyanea basalibus, fasciisque tribus macularibus flavis ; posticæ basi maculaque discali hyalinis ; pedes genubus tarsisque posticis apice albis.

Glaucopsis histrio, Guér. Icon. Règne Anim. Ins. Texte, 502.

Allied to *E. capistrata* ?

Bolivia.

Group 9. HIRA.

Corpus crassum, ad partem metallicum. Antennæ usque ad apices subpectinatæ. Abdomen apicem versus latius. Alæ opacæ sat angustæ ; anticæ nonnunquam maculatæ. Pedes graciles ; tibiæ posteriores calcaribus parvis.

Euchromia, p., Hübn. Verz. Schmett. 121.

Body thick, partly metallic. Antennæ minutely pectinated to the tips. Wings opaque, squamose, rather narrow, sometimes spotted. Abdomen broader towards the tip. Legs slender ; tibiæ with small spurs at three-fourths of the length and at the tips.

24. EUCHROMIA SPERCHIUS.

Nigra ; caput et thorax cyaneo varia, humeri rufi ; abdomen fasciis cyaneo-albis et cyaneis unaque basali lutea alteraque media rufa ; alæ anticæ disco basali fasciaque abbreviata post media lutescentibus guttaque media cyanea ; alæ posticæ macula una basali alteraque discali lutescentibus, illa postice limpida.

Sphinx adscita Sperchius, Cram. Pap. Exot. ii. 79, pl. 146, f. C.

Euchromia Sperchia, Hübn. Verz. Schmett. 121, 1306.

Var. Shoulders white. Abdomen with a white band at the base and another in the middle.

a, b. Congo. Presented by Sir J. Richardson.

c—e. Sierra Leone. Presented by the Rev. D. F. Morgan.

f. ——— ? From Mrs. Henry's collection.

g. ——— ?

25. EUCHROMIA LETHE.

Alæ nigræ, maculis duabus luteis; abdomen cingulis rubris nigris cyaneis albisque.

Sphinx Lethe, *Fabr. Sp. Ins.* ii. 162, 27; *Mant. Ins.* ii. 104, 33
Ent. Syst. iii. 1, 396, 35.

Sphinx adscita Eumolpos, *Cram. Pap. Exot.* iii. 8, pl. 197, f. D.
Var. β. Sphinx Sperchius, *Cram. Pap. Exot.* ii. 79, pl. 146, f. 6.

Sphinx Zygæna Lethe, *Gmel. ed. Syst. Nat.* i. 5, 2394, 120.

Euchromia Lethe, *Hübner. Verz. Schmett.* 121, 1307.

Africa.

26. EUCHROMIA FORMOSA.

Alæ nigræ, maculis flavis; anticæ lunula centrali maculaque baseos cyaneo-metallicis; abdomen annulis sex cyaneo-metallicis cingulo fulvo interruptis; humeri fulvi.

Glaucopis formosa, *Boisd. Guér. Icon. Règne Anim. Ins.* pl. 84, bis.
Faune Ent. Mad. Bourb. et Maur. Léop. 82, 1, pl. 11, f. 3.

Madagascar.

27. EUCHROMIA ISIS.

Prothorax et abdominis annuli duo flavi annulique quinque vel sex viridi-aurei; alæ nigræ; anticæ maculis sex diaphanis, una ad basim, duabus mediis inæqualibus coadunatis, tribus posticis elongatis; posticæ basi maculaque media diaphanis, hæ puncto medio viridi-cyaneo, illæ puncto medio basique cyaneis.

Glaucopis Isis, *Boisd. Voy. de l'Astrolabe*, Pt. 1, *Lep.* 193, 2.

28. EUCHROMIA INTERSTANS.

Nigra; caput, thoracis maculæ duæ vittæque tres, abdominisque vittæ tres e maculis transversis cyaneæ aut viridiæ aut auratæ; caput anticæ album; pectus viride; abdomen fascia interrupta basali flava alteraque aurantiaca integra subfusca alba; alæ nigro-fusce; anticæ macula oblonga basali duabusque discalibus subconnexis flavis; posticæ maculis duabus flavis una basali altera discali.

Nearly allied to *E. Sperchius*. Black. Head mostly, two fore spots and three stripes of the thorax, and three rows of transverse spots on the abdomen blue or green or gilded. Head white in front. Proboscis ferruginous. Thorax mostly green beneath. Wings blackish brown. Fore wings with an oblong yellow spot near the base, and with two almost connected and forming a short band in the disk. Hind wings with two yellow spots, one at the base, the other in the disk. Abdomen with a yellow interrupted band at the base, and an orange entire one in the middle, and corresponding to a white band beneath. Coxæ mostly white. Male sexualia tawny. Length of the body 8—9 lines; of the wings 23—24 lines.

Var. β. Male. Abdomen wholly blue between the orange band and the tip. Legs testaceous beneath.

a, b. Sierra Leone. Presented by the Rev. D. F. Morgan.

c. Ashanti. From the Wesleyan Missionary Society.

d. ———?

29. EUCHROMIA MADAGASCARIENSIS.

Alæ nigrae, maculis luteo-fulvescentibus basi rubicantibus; abdomen nigro-cyaneum, cingulo basali albo, alteroque medio supra rubro subtus albo; prothorax humerique rubro-fulvi.

Glaucoptis Madagascariensis, Boisd. Faune Ent. Mad. Bourb. et Maur. 83, 2, pl. 11, f. 4.

Madagascar.

a. Zoolu, South Africa. Presented by G. F. Angas, Esq.

b, c. Port Natal. From M. Gueinzus' collection.

d. Port Natal. From M. Becker's collection.

30. EUCHROMIA MELANTHIS.

Nigro-fusca; pectus coccineo guttatum; alæ quatuor fascia sub-basali, anticæque lata apicali albidis.

Sphinx adscita Melanthus, Cram. Pap. Exot. iv. 147, pl. 367, f. C. Pseudomya Melanthis, Hübn. Verz. Schmett. 124, 1344.

Surinam.

Group 10. HIPPOLA.

Mas. Corpus cylindricum, gracile. Palpi sat longi, basi valde pilosi; articulus 3us parvus, apice conicus. Antennæ sat late plu-

mosæ. Abdomen longum, lineare. Alæ longæ, angustæ, plerumque opacæ. Pedes sat longi; tibie anticæ subtus canaliculatæ; posteriores calcaribus parviusculis.

Euchromia, p., *Hübner*.

Male. Body cylindrical, slender. Palpi very hairy at the base, moderately long; third joint small, conical at the tip, not more than one-fourth of the length of the second. Antennæ rather deeply plumose. Wings long and narrow, mostly opaque; discal areolet-veinlet forming a right angle; discal fold distinct along the whole length. Abdomen long, linear; appendages small. Legs moderately long; fore tibie furrowed beneath; middle and apical spurs of the hind tibie rather small.

31. EUCHROMIA FEROX.

Mas. *Purpurea*; caput aurantiaco fasciatum; antennæ cyanæ apice albæ; thorax aurantiacus, vittis duabus maculaque scutellari purpureis; pectoris latera aurantiaco bivittata; abdominis segmenta fasciis utrinque connexis aurantiacis; alæ anticæ cyaneo-virides, marginibus posticis purpureis, maculis duabus strigaeque brevissima flavo-albis; posticæ purpureæ cyaneo-viridi variæ, striga lata basali postica alba.

Male. Dark purple. Head with tawny hairs in front and with a short orange band behind. Palpi with black hairs towards the base. Antennæ dark blue, white above towards the tips. Thorax orange with two purple stripes, and on the scutellum a purple spot, connected with the stripe on each side. Pectus with two oblique orange streaks on each side. Fore wings dark bluish green, purple along the hind borders, with two small yellowish white spots between the first and third inferior veinlets, and with a very short yellowish white streak before the middle of the discal areolet, and only visible beneath. Hind wings purple, partly bluish green, with a broad white streak near the base and towards the hind border. Abdominal segments above and beneath with orange bands which are connected on each side; appendages testaceous. Legs bluish purple; coxæ beneath with orange tomentum, which also appears, but much more slightly, on the femora. Length of the body 7 lines; of the wings 22 lines.

a. United States. Presented by E. Doubleday, Esq.

32. EUCHROMIA APRICANS.

Nigro-viridis, proboscide antennis pedibusque nigris; abdomen basi albo quadrimaculatum, segmentis rufo cinctis, subtus e maculis albis bivittatum alboque unifasciatum; alæ anticæ supra subtusque flavo biguttatæ striga antica limpida; posticæ macula elongata lasali limpida.

Blackish green. Proboscis, palpi, antennæ and legs black. Wings purplish black. Fore wings with a limpid streak along half the length of the fore border, with a yellow dot at the base, and another by the fore border at two-thirds of the length; two yellow dots beneath at the base. Hind wings with an elongated limpid spot at the base. Abdomen with two white spots on each side at the base; and with a slender interrupted red band near the hind border of each segment; under side with two rows of lateral white spots, and with a white band beyond the middle. Length of the body 6 lines; of the wings 20 lines.

Glaucopis apricans, MSS.

a. Venezuela. From M. Becker's collection.

33. EUCHROMIA MEONES.

Nigra; caput, thorax, pectus et venter cyaneo guttata; abdomen e maculis cyaneo bivittatum rufo univittatum; alæ anticæ guttis duabus basalibus duabusque discalibus anticis cyaneis, striis basalibus et anticis rufis maculisque duabus discalibus limpidis; alæ posticæ macula magna discali basim versus angustata limpida.

Sphinx adscita Meones, Cram. Pap. Exot. 73, pl. 325, f. E.

Euchromia Meonis, Hübn. Verz. Schmett. 121, 1311.

Glaucopis comta, Anon. Ins. Surinam, 81, pl. 37.

Surinam.

a. Ega, Amazon River. From Mr. Bates' collection.

b. Brazil. From Mr. Bates' collection.

c. Venezuela. From Mr. Dyson's collection.

d. Brazil.

34. EUCHROMIA DIVERSIPENNIS.

Nigro-fusca; caput cyaneo sexguttatum; thorax cyaneo quinqueguttatus; abdomen e maculis cyaneis bivittatum, basi albo bimaculatum, basi subtusque rufo maculatum; alæ anticæ guttis quatuor cyaneis maculis duabus limpidis vittisque duabus rufis, posticæ brevissimæ postice albæ; tibiæ anticæ cyaneo squamosæ.

Blackish brown. Head with six blue dots, which like the other spots of that colour appear green in some directions. Palpi and antennæ black. Thorax with two blue spots in front, one on each side, and one on the scutellum. Fore wings at the base with two blue dots, from each of which proceeds a red stripe, one extending along three-fourths of the fore border, the other forked and very short; two limpid spots, one small near the fore border, the other large in the disk nearer the tip; between them two blue dots. Hind wings very small, not one-third of the length of the fore wings; hinder half white above; under side with a white spot and a blue spot, the latter diffused. Abdomen with red spots at the base, and thence beneath along half of each side, also with two white spots at the base, and with a row of large blue spots along each side. Fore tibiæ with blue scales above. Length of the body 7 lines; of the wings 22 lines.

a. Tapayos, Brazil. From Mr. Bates' collection.

35. EUCHROMIA LATERALIS.

Nigra; frons alba; thoracis et abdominis latera viridia cyaneo et argenteo micantia; abdomen subtus apud medium album, basi albo fasciculatum; alæ anticæ basi viridi maculatæ, fasciis duabus macularibus hyalinis; posticæ lateribus albidis, macula discali hyalina.

Euchromia lateralis, Guér. *Icon. Règne Anim. Ins. Texte*, 503. Parà.

36. EUCHROMIA THELEBAS.

Nigra; abdomen coccineum nigro flavoque fasciatum; alæ anticæ maculis tribus limpidis unaque cyanea; posticæ macula una limpidæ.

Sphinx adscita Thelebas, *Cram. Pap. Exot.* ii. 86, pl. 150, f. D.

Euchromia Thelebe, *Hüb. Verz. Schmett.* 121, 1310.

Euchromia *Irus*, var. ?

Bengal.

37. EUCHROMIA IRUS.

Nigra, cyaneo viridique varia; abdominis dimidium apicale coccineum; alæ anticæ basi et macula arcuata discali cyaneis fasciisque duabus abbreviatis macularibus limpidis; posticæ basi fasciæque lata discali limpidis.

Sphinx adscita *Irus*, *Cram. Pap. Exot.* iv. 150, pl. 368, f. A.

Euchromia *Ira*, *Hüb. Verz. Schmett.* 121, 1309.

a. Australia. From the Voyage of H. M. S. Rattlesnake.

b, c. Australia. From Mr. Dring's collection.

Var. ? *Glaucopis Ganymede*, *Doubleday, Lort's Discov. Austral. Append.* i. 519, pl. 3, f. 3.

"Wings black, fore wings with a small diaphanous spot near the base, below the median vein; a larger one before the middle extending from the subcostal to the radial vein, divided by the median vein into two unequal portions, the extremity of the areolet marked by a crescent-shaped, metallic blue spot, beyond which are two diaphanous spots, one placed just below the origin of the second subcostal veinlet, the other much larger, divided by the last median veinlet. Hind wings with a white, partly diaphanous spot, close to the base, and a transverse diaphanous band a little beyond the middle. Body and legs black. Face, orbits of the eyes and coxæ white. Abdomen crimson; first and second segments both above and below, the third above, of a sooty black; fourth, fifth, sixth, and seventh margined with black above, in front, eighth entirely crimson. Female wanting the small spot near the base of the fore wings, the third segment of the abdomen slightly bronzed; coxæ black. Length of the wings 30 lines."

38. EUCHROMIA IRIUS.

Frons, prothorax et thoracis fasciæ duæ viridi-aurea; abdomen cingulo basali supra albido, cingulisque quinque apicalibus rubris, subtus rubrum; alæ nigrae; anticæ maculis sex diaphanis, una ad basim, duabus mediis, tribus posticis; alæ posticæ basi fasciæque diaphanis, illis puncto medio basique viridi-aureis.

Glaucopis Irius, *Boisd. Voy. de l'Astrolabe*, Pt. 1, *Lep.* 192, 1, pl. 5, f. 8.

Euchromia Irus, var. ?

Amboina. Offack. New Guinea.

39. EUCHROMIA BOURICA.

Abdomen nigrum, lateribus sanguineo annulatis; alæ nigrae puncto cyaneo; anticæ maculis sex diaphanis, una basali, duabus mediis, tribusque pone medium; posticæ maculis tribus minutis venis tantum divisis.

Glaucopis Bourica, *Boisd. Voy. de l'Astrolabe*, Pt. 1, *Lep.* 194, 3.
Bourou.

40. EUCHROMIA FENESTRATA.

Nigra; alæ anticæ maculis duabus ante-mediis approximatis, postica majore, fasciæque abbreviata post-media arcuata extus indentata, limpidis; alæ posticæ limpida, nigro marginatæ; pedes rufi.

Sphinx adscita fenestrata, *Stoll, Cram. Pap. Exot.* v. 140, pl. 30, f. 5. *Drury, Ins.* i. 54, pl. 25, f. 3.

Entomis fenestra, *Hübner, Verz. Schmett.* 122, 1323,

Glaucopis fenestrata, *Westw. ed. Drury*, i. 53, pl. 25, f. 3.

Jamaica.

41. EUCHROMIA SYNTOMOIDES.

Glaucopis Syntomoides, *Boisd. Spec. Gén. Léop.* i. pl. 16, f. 4.

42. EUCHROMIA EPILAIS.

Mas. Cyanea, gracilis, cylindrica, viridi et purpureo varia; antennæ subpectinatae apice serratae albæ; pectus albo maculatum; abdomen longum, lineare, maculis octo albis, apice rufum; alæ longæ, anticæ maculis quinque albis, posticæ nigro-fusca macula discali alba.

Glaucopis Epilais, *MSS.*

Male. Dark blue, slender, cylindrical, tinged with green and purple. Proboscis black. Palpi rather short, nearly straight; third

joint very small, conical, not one-fourth of the length of the second. Antennæ minutely pectinated, white above towards the tips where they are serrated. Pectus with white spots on each side. Wings long. Fore wings with a white spot at the base, and with four white hyaline spots in the disk; first spot (from the base) and fourth towards the hind border; second and third smaller and near the fore border; under side and hind wings brownish black, the latter with a single white spot in the disk. Abdomen long, linear, with two white spots above at the base, with two on each side in the middle, and with four beneath towards the base; tip a little broader, deep red; appendages testaceous, small. Legs rather long; coxæ and knees with dots of white tomentum; hind tarsi white, except at the base; fore tibiæ dentate beneath; middle and apical spurs of the hind tibiæ moderately long. Length of the body 9 lines; of the wings 23 lines.

a, b. Honduras. From Mr. Dyson's collection.

Group 11. ENDERA.

Color ad partem metallicus. Corpus sublineare, non latum. Palpi longitudine mediocres; articulus 2us sat brevis. Alæ anticæ longæ, subangustæ, maculis limpidis; posticæ non angulatæ. Pedes longiusculi, subgraciles; tibiæ posticæ calcaribus sat longis. *Euchromia*, p., *Hübneri Verz. Schmett.* 121.

Colour partly metallic. Body nearly linear, not broad. Palpi moderately long; second joint rather short. Antennæ pectinated to the tips. Wings long, rather narrow, with limpid spots. Hind wings not angular. Legs rather long and slender; hind tibiæ with two moderately long spurs; first at three-quarters of the length; second at the tip.

43. EUCHROMIA VULCANUS.

Nigra; thorax albo bimaculatus, subtus albo fasciatus; abdomen e maculis albis quadrivittatum, apice rufo subhirtum; alæ anticæ gutta basali alba maculisque octo limpidis, posticæ maculis tribus limpidis; femora antica rufo-hirta.

Euchromia Vulcanus, *MSS.*

Black, clothed with black hairs. Thorax with a white spot on each side, and with a white band on the hinder part beneath. Fore wings with a white dot on each side at the base, and with eight limpid spots; two near the base; two in the disk, and four forming a

short band nearer the tip. Hind wings with three limpid spots; two near the base, and one beyond the middle. Abdomen with two rows of white spots along each side, and with a few red hairs at the tip. Fore femora clothed with red hairs. Length of the body 9 lines; of the wings 24 lines.

a. Mexico. From M. Becker's collection.

44. EUCHROMIA CEPHEUS.

Nigra, cyaneo guttata; abdomen basi fasciis interruptis testaceis; alæ anticæ strigis basalibus rufescentibus, fasciis duabus (1a interrupta) testaceis diaphanis, guttisque duabus mediis cyaneis; posticæ maculis duabus rufis, 1a basali, 2a discali.

Sphinx adscita Cepheus, *Cram. Pap. Exot.* iii. 8, pl. 197, f. E.

Euchromia Cepheus, *Hübner. Verz. Schmett.* 121, 1313.

Glaucopis Cepheus, *Anon. Ins. Surinam*, 89, pl. 41.

Surinam.

a, b. Venezuela. From M. Becker's collection.

c. Venezuela. From Mr. Dyson's collection.

45. EUCHROMIA NYCTEUS.

Nigro-fusca; thorax cyaneo bivittatus; abdomen cyaneum fasciis rufis vittisque duabus macularibus cyaneis, basi album; alæ quatuor gutta basali anticæque guttis duabus anticis flavis.

Sphinx adscita Nycteus, *Cram. Pap. Exot.* iv. 74, pl. 325, f. F.

Euchromia Nyctea, *Hübner. Verz. Schmett.* 121, 1314.

Surinam.

46. EUCHROMIA MELANTHUS.

Cyanea; thorax fascia antica vittisque duabus rufis; abdomen segmentorum marginibus posticis rufis, basi alba rufo varia; alæ quatuor nigre, macula basali et guttis duabus ante-mediis, anticæque guttis quatuor post-mediis fasciam brevem fingentibus, flavescente-hyalinis.

Sphinx adscita Melanthus, *Cram. Pap. Exot.* iii. 94, pl. 248, f. C.

Euchromia Melanthe, *Hübner. Verz. Schmett.* 121, 1315.

47. EUCHROMIA SAULCYI.

Nigro-cyanea, cyaneo pallidiore varia; antennæ apice intus albidae; abdomen basi album; alæ anticæ gutta basali fasciisque tribus macularibus albis; posticæ fasciis duabus macularibus albis.

Glauconis Saulcyi, Guér. Icon. Règne Anim. Ins. Texte, 502.
Martinico.

48. EUCHROMIA SUBCYANEA.

Nigra; thorax albo septemguttatus; alæ anticæ perangustæ maculis tribus magnis albo-hyalinis, basi margineque postico subtus cyaneis; posticæ antice subtusque cyaneæ maculis tribus albo-hyalinis; coxæ anticæ et femora posteriora albo strigata.

Black, clothed with black hairs. Fore part of the thorax blackish green on each side in some aspects, and with six white dots, two on each side and two nearer the disk; a white dot behind the scutellum. Fore wings very narrow, with three large white hyaline spots which have a slight opaline lustre, and form a very slightly curved stripe on the disk; third spot intersected; under side brilliant blue towards the base and along the hind border. Hind wings brilliant blue in front and wholly so beneath, with three hyaline white spots; basal spot of moderate size; the other two small. Femora and tibiæ with blue scales; a white streak on each of the posterior femora, and a larger one on each of the fore coxæ. Length of the body 9? lines; of the wings 25 lines.

a. Mexico. From M. Hartweg's collection.

49. EUCHROMIA DIMINUTA.

Mas. Viridis, brevis, sublinearis; antennæ cyaneæ, sat late pectinatae; abdomen cyaneo-viride, apice fasciculatum; alæ anticæ striga una maculisque tribus limpidis; posticæ limpidæ marginibus nigro-viridibus.

Male. Metallic green, short, nearly linear. Proboscis piceous. Antennæ blue, rather deeply and closely pectinated. Fore wings with a limpid streak at the base, with two small limpid spots placed transversely in the disk, and with one near the tips. Hind wings limpid, with blackish green borders, which are broadest in front. Abdomen bluish green, tufted at the tip. Legs rather short; hind

tibiæ slightly curved, with a shallow furrow, with no middle spurs, their apical spurs small. Length of the body 4 lines; of the wings 10 lines.

Resembles *Syntomis*.

a. Ceylon. Presented by R. Templeton, Esq.

Group 12. NAPATA.

Mas et Fœm. Corpus robustum, breve, metallicum. Palpi breves; articulus 2us parvus. Antennæ validæ, subtus pectinatæ. Alæ anticæ maculis limpidis, non metallicæ; posticæ apices versus rotundatæ et oblique truncatæ. Pedes graciles, vix elongati; tibiæ posticæ calcaribus apicalibus minimis.

Male and Female. Body stout, short, metallic. Palpi very short, second joint small. Antennæ stout, pectinated beneath to the tips. Wings squamose with limpid spots, not metallic. Hind wings much rounded and obliquely truncated on the fore border towards the tips. Legs slender, of moderate length; no spurs on the tibiæ except the apical one which is extremely small.

50. EUCHROMIA TERMINALIS.

Mas. *Nigra; caput cyaneo-viride, antice album; palpi subtus albi; antennæ late pectinatæ, basi subtus albæ; thorax viridi vittatus, albo bimaculatus; pectus viride; abdomen sat breve, viridi bivittatum alboque univittatum; alæ longæ angustæ; anticæ fuscæ vitta sublimpida apice albæ; posticæ nigræ basi subtus virides margine postico subtus albo; pedes fusci, graciles, albo-tomentosi.*

Male. Black. Head bright bluish green, white in front. Palpi moderately long, white beneath; third joint extremely small, not more than one-sixth of the length of the second. Antennæ deeply pectinated, white at the base beneath. Thorax green in front with a white spot on each side, and with green stripes. Pectus mostly green. Wings long and narrow. Fore wings dark brown, with a nearly limpid stripe widening in the disk from the base to beyond the middle, marked with green at the base; tips white; discal streak distinct towards the tip of the discal areolet. Hind wings black, green at the base beneath; hind border white beneath. Abdomen rather short, bright green along each side, and with a white dorsal stripe which is much more distinct beneath. Legs pale brown,

slender, mostly covered with white tomentum; fore tibiæ slightly dentate beneath; apical spur of the hind tibiæ very small.

Fem. Antennæ slightly pectinated. Abdomen a little longer than that of the male. Length of the body 4 lines; of the wings 12 lines.

a. Pernambuco. Presented by J. P. G. Smith, Esq.

b. Brazil. From Mr. Stevens' collection.

c—d. Honduras. From Mr. Miller's collection.

Var. *Caput cyaneo-viride, antice album; palpi nigri, supra subtusque albi; thorax cyaneo-viridi trivittatus; alæ antica nigro-fusca, basi cyaneo-virides, apice albæ, macula maxima oblonga limpida; alæ postica nigra, albo ciliata; abdomen vitta dorsali alba duabusque lateralibus cyaneo-viridibus.*

Head bright bluish green, white in front. Palpi black, white above and below. Antennæ black. Thorax bright bluish green in front, and with three stripes of the same colour. Fore wings blackish brown, bright bluish green at the base, white at the tips, and with a very large oblong limpid spot which widens from the base to beyond the middle of the disk. Hind wings black; hind borders fringed with white. Abdomen with a white dorsal stripe and with two bluish green lateral stripes. Legs black, adorned with green scales. Length of the body 4 lines; of the wings 12 lines.

a, b. Venezuela. From Mr. Dyson's collection.

c, d. Honduras. From Mr. Dyson's collection.

Group 13. TIPULODES.

Corpus longum, cylindricum, gracillimum. Palpi mediocres; articulus 3us sat longus, 2o multo brevior. Antennæ maris pectinatæ, fœminæ subpectinatæ. Abdomen longum, lineare. Alæ longæ, perangustæ, opacæ, apice rotundatæ; antica postica vix angulatæ; postica ultra abdominis apicem vix dilatatæ. Pedes graciles, sat longi; tibiæ anticae subtus dentatæ; posticae calcaribus mediis et apicalibus longitudine mediocres.

Tipulodes, Boisd. Voy. de l'Astrolabe.

Body long, cylindrical, very slender. Palpi of moderate length; third joint rather long, but much shorter than the second. Antennæ of the male moderately, of the female slightly, pectinated. Wings opaque, long, very narrow, rounded at the tips. Fore wings hardly

angular on the hind border. Hind borders of the hind wings hardly extending beyond the base of the abdomen. Abdomen long, linear. Legs slender, rather long; fore tibiæ dentated beneath; middle and apical spurs of the hind tibiæ moderately long.

This group is chiefly distinguished by its narrow body and slender wings, in which characters some of the preceding species, (e. g.) *E. Epilaïs* and *E. ferox* approach it successively.

51. EUCHROMIA TINA.

Atra; caput cyaneum; thorax maculis duabus anticis scutelloque cyaneis; abdomen cyaneo trivittatum; alæ anticæ cyaneo binotatæ et aurantiaco latissime fasciatæ; femora tibiæque cyanea.

Tipulodes Tina, MSS.

Deep black. Head blue. Thorax with two blue spots in front; scutellum blue. Fore wings with a blue mark at the base, and with a slight blue streak near the fore border before the middle; beyond this is a very broad bright orange band which does not extend to the hind border. Abdomen with three blue stripes; the middle one consisting of spots; under side with two stripes. Femora and tibiæ mostly blue. Length of the body $6\frac{1}{2}$ lines; of the wings 19 lines.

a. Rio Grande. From M. Becker's collection.

52. EUCHROMIA IMA.

Alæ anticæ nigre vitta longitudinali late rubra; posticæ nigre, costa rubra.

Tipulodes ima, Boisd. Voy. de l'*Astrolabe*, Pt. 1, *Ép.* 196, 2. *Atlas*, *Ent. Lep.* pl. 3, f. 7.

Brazil.

Var.? *Nigra; thoracis latera rufa; abdominis segmentorum margines postici cinerei; alæ anticæ vitta lata rufa; posticæ antice aurantiacæ; maris pedes ad partem albid.*

Black. Thorax red along each side. Fore wings with a broad red stripe extending from the base to near the tips and occupying

the disk. Hind wings orange along the fore border for full three-fourths of the length. Hind borders of the abdominal segments gray. Legs of the male partly whitish. Length of the body 4—4½ lines; of the wings 11—12 lines.

a. Rio Janeiro. From Mr. Stevens' collection.

b. Rio Grande. From M. Becker's collection.

Closely allied to the *Lithosii*.

53. EUCHROMIA NEGLECTA.

Frons luteus; abdomen viridi-cyaneo micans; alæ anticæ pallide fuscae venis obscurioribus; posticæ nigrae fimbriola alba.

Tipulodes neglecta, *Boisd. Voy. de l'Astrolabe*, Pt. 1, *Lép.* 195, 1. *Atlas, Ent. Lep.* pl. 3, f. 8.

Peru.

Group 14. CALONOTOS.

Color ad partem metallicus. Corpus sat gracile. Palpi mediocres; articulus 2us parvus. Antennæ usque ad apices pectinatæ. Alæ anticæ longæ, angustæ; posticæ non angulatæ. Pedes validi; tibie posticæ calcaribus quatuor mediocriter elongatis.

Calonotos p., *Hübner Verz. Schmett.* 123.

Colour partly metallic. Body rather slender. Palpi moderately long; second joint small. Antennæ pectinated to the tips. Wings long and narrow. Hind wings not angular. Legs rather stout; median and apical spurs of the hind tibie of moderate length.

Chiefly distinguished from Group 7 by the disposition of the colours.

54. EUCHROMIA PHLEGMON.

Alæ atræ, albo punctatæ; abdomen flavum, nigro lineatum.

Zygæna Phlegmon, *Fabr. Sp. Ins.* ii. 160, 14; *Mant. Ins.* ii. 103, 16; *Ent. Syst.* iii. 391, 18.

Sphinx adscita Phlegmon, *Cram. Pap. Exot.* i. 57, pl. 35, f. H.

Sphinx Zygæna Phlegmon, *Gmel. ed. Syst. Nat. i. 5, 2393, 116.*
Calonotos Phlegmon, *Hübner. Verz. Schmett. 123, 1327.*

Surinam.

- a. Parà. From Mr. Bates' collection.
- b. Santarem, Brazil. From Mr. Bates' collection.
- c. ——— ?

55. EUCHROMIA VARIPES.

Mas. Atræ; caput album, postice aureo-viride; antennæ sat late pectinatæ; thorax aureo-viridi quadrimaculatus alboque bimaculatus; pectus fuscum; abdomen aureo-viridi bivittatum, basi albo fasciatum, subtus disco albo; alæ nigræ, anticæ latæ maculis quatuor discalibus limpidis strigis semihyalinis maculisque aureo-viridibus, nonnullis basalibus, posticæ gutta media limpida; pedes graciles, aureo-viridi varii, femoribus tibiisque posticis supra albis, tibiis posticis apices versus dilatatis et sulcatis.

Deep black. Head white above and in front, golden green behind. Palpi rather long, hardly curved; third joint about one-fourth of the length of the second. Antennæ rather deeply pectinated. Thorax with four golden green spots, two in front and one near the base of each hind wing; a white spot by the base of each fore wing. Pectus brown. Wings black. Fore wings broad, with some semihyaline streaks and golden green marks at the base; two large oblong hardly divided limpid spots in the disk, the fore one occupying the discal areolet; two smaller limpid spots nearer the tip, the hind one semidivided. Hind wings with a limpid dot in the middle. Abdomen with a white band at the base and with two golden green stripes which are united at the tip; under side with a tuft of white hairs on each side at the base and with a white disk. Legs slender, partly golden green; fore tibiæ dentate beneath; hind femora and hind tibiæ white above; hind tibiæ dilated and channelled along half the length from the tips. Length of the body 5 lines; of the wings 14 lines.

- a. Parà. From Mr. Bates' collection.

56. EUCHROMIA CASSANDRA.

Nigra; abdomen utrinque maculis quinque cæruleis; ano, ore basique femorum abdominisque coccineis.

- Sphinx Cassandra, *Linn. Syst. Nat.* ii. 806, 41.
 Zygæna Cassandra, *Fabr. Sp. Ins.* ii. 160, 16; *Mant. Ins.* ii. 103, 20; *Ent. Syst.* iii. 1. 392, 22.
 Sphinx adscita Cassandra, *Cram. Pap. Exot.* iv. 218, pl. 394, f. G.
 Sphinx Zygæna Cassandra, *Gmel. ed. Syst. Nat.* i. 5, 2394, 41.
 Calonotos Cassandra, *Hübner. Verz. Schmett.* 123, 1332.
 Glaucopis Cassandra, *Anon. Ins. Surinam*, 193, pl. 85.
 a. Venezuela. From M. Becker's collection.
 b, c. Venezuela. From Mr. Dyson's collection.
 d. Brazil. Presented by E. Doubleday, Esq.
 e, f. Brazil. From Mr. Mornay's collection.

57. EUCHROMIA HELYMUS.

Atra; caput et thorax aureo-viridi maculata; abdomen aureo-viridi trivittatum; alæ anticæ strigis basalibus maculaque discali aureo-viridibus.

- Zygæna Helymus, *Fabr. Sp. Ins.* ii. 162, 28. *Cram. Pap. Exot.* i. 4, pl. 2, f. D, E. *Stoll, Suppl. Cram. Pap. Exot.* v. pl. 23, f. 2.
 Sphinx Zygæna Helymus, *Gmel. ed. Syst. Nat.* i. 5, 2394, 122.
 Sphinx adscita Aleceton, *Cram. Pap. Exot.* iv. 184, pl. 382, f. D.
 Antichloris Aleceton, *Hübner. Verz. Schmett.* 124, 1350.
 Calonotos Helymus, *Hübner. Verz. Schmett.* 123, 1329.
 Glaucopis Helymus, *Anon. Ins. Surinam*, 125, pl. 59.
 Glaucopis aterrima? *Anon. Ins. Surinam*, 217, pl. 97.
 Surinam.
 a. Demerara. Presented by J. S. Bowerbank, Esq.
 b. ———? Presented by the Entomological Club.
 c. ———? From Mr. Children's collection.

58. EUCHROMIA TROPICA.

Nigra; antennæ sat late pectinatæ; thorax cyaneo biguttatus; pectus cyaneum; abdomen aureo-viridi bivittatum, subtus e maculis albis bivittatum; alæ anticæ angustæ basi cyaneo notatæ subtus cyaneo bivittatæ; posticæ cinereæ marginibus nigricantibus.

Black, clothed with black hairs. Antennæ rather deeply pectinated. Thorax with two blue dots on the disk between the front of the fore wings; under side mostly blue. Fore wings narrow, with a blue mark on each at the base, and with two blue stripes beneath;

the fore one extending along half the length of the wing from the base; the hind one very short. Hind wings gray, with blackish borders. Abdomen with a golden green stripe on each side; under side with two rows of white spots. Length of the body 6 lines; of the wings 19 lines.

Glaucoptis tropica, MSS.

a. Honduras. From Mr. Dyson's collection.

b. Brazil. From M. Becker's collection.

59. *EUCHROMIA INTRICATA*.

Mas. *Atra, linearis, cylindrica; caput cyaneo biguttatum; alæ nigro-fuscae, macula cuique magna oblonga discali hyalina; abdomen guttis duabus basalibus apiceque cyaneis.*

Male. Deep black, linear, cylindrical. Head with a blue dot on each side. Palpi moderately long; third joint about one-fourth of the length of the second. Antennæ slightly pectinated. Wings brownish black, with a large oblong hyaline spot in each disk. Fore wings about twice the length and breadth of the hind wings; discal fold distinct along the whole length; veinlets at the tip of the discal areolet forming a right angle. Abdomen with a blue dot at the base; tip blue. Hind tibiae with small apical spurs. Length of the body $5\frac{1}{2}$ lines; of the wings 18 lines.

a. Brazil. From Mr. Bates' collection.

b. Rio Janeiro. From Mr. Stevens' collection.

Group 15. *ILLIPULA*.

Corpus et alæ plus minusve metallica, hæ basi et hoc plerumque albo guttata. Antennæ in utroque sexu usque ad apices subpectinatae. Abdomen sublineare, non petiolatum. Alæ longæ, angustæ, opacæ, guttis basi exceptis immaculatæ; posticæ non angulatæ. Pedes graciles, tibiis tarsisque posticis non plumosis, calcaribus posticis abbreviatis.

Like *Macrocneme*. Hind tibiae and hind tarsi of the male not plumose. Body and wings more or less metallic, the former and the latter at the base generally with white dots. Antennæ slightly pectinated to the tips in both sexes. Abdomen nearly linear, not petiolated. Wings long, narrow, opaque, unspotted with the exception of the basal dots; hind wings not angular. Legs slender; hind spurs short.

60. EUCHROMIA MELANOCHLOROS.

Niger; caput viride, rufo biguttatum; palpi basi albo guttati; thoracis pars antica, scutellum vittæque duæ viridia; abdomen aureo-viride vitta nigra dorsali, subtus albo bivittatum; alæ nigro-fuscae, apud venas aureo-virides; pedes nigro-virides, coxis anticis basi albo guttatis.

Sesia melanochloros, Anon. Ins. Surinam, 145, pl. 69.

Head green, with a red dot on each side, and a white dot at the base of each of the palpi. Antennæ black. Thorax black, green in front and on the scutellum, and with an oblique green stripe on each side. Wings blackish brown, tinged with golden green which is most bright along the veins. Abdomen golden green, with a black dorsal stripe, and beneath with two white stripes which are interrupted towards the tip. Legs black, tinged with green; fore coxæ with a white dot on each at the base. Length of the body 7 lines; of the wings 20 lines.

a. Santarem, Brazil. From Mr. Bates' collection.

b. Brazil. From Mr. Mornay's collection.

c. ———? From Mr. Children's collection.

Group 16. PAMPA.

Color sæpissime niger, vittis integris aut macularibus auratis. Antennæ usque ad apices pectinatæ. Alæ longæ, nigræ, opacæ, maculis nonnunquam limpidis. Pedes longiusculi, sat graciles; tibis anticis subtus dentatæ; posticæ calcaribus quatuor plerumque parvis aut minimis.

Macrocneme, p., Hübn. Verz. Schmett. 124.

Very nearly allied to Group 8. General colour black with golden green stripes or rows of spots. Antennæ minutely pectinated to the tips. Wings black, opaque, rarely with limpid spots. Legs rather long and slender; fore tibiae dentate beneath; middle and apical spurs of the hind tibiae generally small or very minute.

61. EUCHROMIA DOLOSA.

Mas. Nigro-fusca; antennæ brevi-pectinatæ; abdomen aureo trivittatum, subtus dimidio basali albo bivittatum; alæ sat angustæ; pedes graciles.

Male. Blackish brown. Palpi short; third joint very small, less than one-fourth of the length of the second. Antennæ thickly but not deeply pectinated; branches clavate. Wings rather narrow; veinlets at the tip of the discal areolet forming a very obtuse angle; discal fold distinct. Abdomen tapering from near the base to the tip, with three gilded stripes above; under side with two white stripes extending nearly half the length from the base. Legs slender; fore tibiæ dentate beneath; hind tibiæ with small middle and apical spurs. Length of the body 5 lines; of the wings 12 lines.

a. Pernambuco. Presented by J. P. G. Smith, Esq.

62. EUCHROMIA CRYPTOLEUCA.

Fœm. Atræ, sat gracilis; caput supra viride; antennæ subpectinatæ; thorax viridi trimaculatus coccineoque bimaculatus; pectus viride; abdomen thorace paullo latius, maculis basalibus et apicalibus viridibus guttisque duabus basalibus coccineis, subtus album; alæ anticæ viridi-squamosæ subtus virides; posticæ cyaneo-virides marginibus nigris, basi limpidæ.

Fem. Deep black, rather slender. Head mostly green above. Palpi moderately long; third joint conical, very small, less than one-fourth of the length of the second. Antennæ very minutely pectinated. Thorax with a green spot on each side in front, and a third on the scutellum and a crimson spot by the base of each fore wing. Pectus mostly green. Wings long and narrow. Fore wings black with a few green scales, green beneath with black tips and hind borders. Hind wings bright bluish green, blackish at the tips and along the hind borders, which latter are limpid towards the base. Abdomen a little broader than the thorax, with a crimson dot on each side at the base, and some green spots on each side near the base and towards the tip; under side bright white excepting the tip. Legs slender; fore tibiæ with a slender tooth beneath; middle and apical spurs of the hind tibiæ small. Length of the body $4\frac{1}{2}$ lines; of the wings 14 lines.

a, b. Paræ. From Mr. Bates' collection.

c. ——— ?

63. EUCHROMIA MYSTICA.

Mas. Atræ; antennæ validæ, brevi pectinatæ; abdomen fusiforme; alæ nigricantes, sat angustæ, anticæ macula antica subapicali irregulari cinereo-alba, basi margineque postico nigricantes; pedes graciles.

Male. Deep black. Palpi short. Antennæ pectinated, stout; branches short. Wings blackish, rather narrow; veins slender. Fore wings black at the base and along the hind border, with a grayish white slender irregular mark in front of each near the tip. Transverse veinlets at the tip of the discal areolet forming an obtuse angle; discal fold appearing in the discal areolet and beyond it. Abdomen fusiform. Legs slender; fore tibiæ not dentate; hind tibiæ with no middle spurs, their hind spurs very minute. Allied to *Procris*? Length of the body 4 lines; of the wings 10 lines.

a. Honduras. From Mr. Dyson's collection.

64. EUCHEROMIA TENEBROSA.

Fœm. *Atra, gracilis; antennæ graciles, serratæ, apice albæ; pectus fuscescens; abdomen longi-fusiforme, subtus fuscum basi album; alæ angustæ, anticæ apice fusæ, posticæ cineræ nigro marginatæ; pedes fusi.*

Fem. Deep black, slender. Palpi rather long, slightly curved; third joint conical at the tip, less than half the length of the second. Antennæ slender, serrated beneath, white above towards the tips. Pectus brownish. Wings narrow. Fore wings deep black, brown towards the tips. Hind wings gray, with blackish hind borders. Abdomen elongate-fusiform; under side brown, white at the base. Legs brown, slender; fore tibiæ dentate; hind tibiæ with moderately long middle and apical spurs; hind tarsi paler at the base. Length of the body $4\frac{1}{2}$ lines; of the wings 11 lines.

a. Parà. From Mr. Bates' collection.

65. EUCHEROMIA INVARIA.

Mas. *Atra, brevis; caput cyaneo varium; antennæ sat late pectinatæ; abdomen breve; alæ longæ; anticæ angustæ purpureo-nigræ; posticæ nigricantes; pedes graciles.*

Male. Deep black, short. Head partly blue. Palpi moderately long; third joint short. Antennæ closely and rather deeply pectinated. Wings long. Fore wings narrow, purplish black. Hind wings blackish, rather broad in proportion to the fore wings. Abdomen short. Legs slender; hind tibiæ with no middle spurs and with very small apical spurs. Length of the body $2\frac{1}{4}$ lines; of the wings 10 lines.

a. Santarem, Brazil. From Mr. Bates' collection.

66. EUCHROMIA FUMIPENNIS.

Viridis; caput albo biguttatum; antennæ nigrae; thorax niger, viridi univittatus, antice viridis rufo bimaculatus; abdomen subtus albo bivittatum; alæ ferrugineo-fuscae; pedes nigri, subtus albi.

Head green, with a white dot on each side between the eyes. Antennæ black. Thorax black, with a green dorsal stripe; fore part green, with a red spot on each side. Wings dark ferruginous brown. Abdomen green, with two broad white stripes beneath. Legs black, mostly white beneath. Length of the body $5\frac{1}{2}$ lines; of the wings 17 lines.

a. Ega, on the Amazon. From Mr. Bates' collection.

67. EUCHROMIA IMPERIALIS.

Fœm. Aureo-viridis, sublinearis, sat brevis; caput cyaneo-viride, proboscide, palpis antennisque nigris; antennæ subpectinatae; abdomen sat latum, basi nigro-fuscum; alæ sat latae; anticae fusco-purpureae; posticae nigrae vitta discali cinereo-hyalina; pedes validi, tibiis tarsisque nigris.

Fem. Golden green, nearly linear, rather short. Head bluish green. Proboscis, palpi and antennæ black. Palpi curved, rather long; third joint not more than one-fourth of the length of the second. Antennæ minutely pectinated. Wings rather broad. Fore wings brownish purple. Hind wings black, with a grayish hyaline stripe in the disk. Abdomen rather broad, blackish brown towards the base. Legs rather stout; tibiæ and tarsi mostly black; fore tibiæ dentate beneath; middle and apical spurs of the hind tibiæ rather long. Length of the body 5 lines; of the wings 16 lines.

a, b. Santarem, Brazil. From Mr. Bates' collection.

68. EUCHROMIA ALIENA.

Fœm. Nigro-fusca, fere cylindrica; antennæ graciles, subsetosae, vix serratae; abdomen subfusiforme; alæ breviusculæ, perangustæ, anticae albo fasciatae, posticae cinereo-fuscae; pedes graciles.

Fem. Blackish brown, nearly cylindrical. Palpi rather short; third joint conical, very small, not more than one-sixth of the length

of the second. Antennæ slender, beset with short bristles, but hardly serrated beneath. Wings very narrow, rather short. Fore wings blackish brown, adorned at two-thirds of the length with a white band whose inner side is ferruginous, brown between the band and the tip. Hind wings grayish brown. Abdomen subfusiform. Legs slender; fore coxæ covered beneath with a white tomentum. Length of the body 4 lines; of the wings 10 lines.

a. Parà. From Mr. Bates' collection.

69. EUCHROMIA LEUCOSTICTA.

Nigro-cyanea, viridi tincta, albo guttata; antennæ nigrae; alæ posticæ antice cinereæ.

Glaucopis unica leucosticta, Hübn.

Macrocneme leucosticta, Hübn. Verz. Schmett. 124, 1343.

Dark blue tinged with green. Antennæ black. Head, thorax, base of the wings, abdomen towards the base and beneath, coxæ and femora with white dots. Hind wings cinereous in front. Length of the body 4 lines; of the wings 14 lines.

a. Parà. Presented by J. P. G. Smith, Esq.

b, c. Parà. From Mr. Bates' collection.

d. Santarem, Brazil. From Mr. Bates' collection.

Group 17. AUTOCHLORIS.

Color submetallicus. Corpus et alæ basi albo guttata. Antennæ maris fere ad apices late pectinatæ, fœminæ ad apices serratæ. Alæ longæ, angustæ, opacæ, guttis basi exceptis immaculatæ; posticæ non angulatæ. Abdomen sublineare, non petiolatum. Pedes graciles. Tibiæ posticæ non plumosæ, calcaribus abbreviatis.

Calonotos, p., Hübn. Verz. Schmett. 123.

Autochloris, p., Hübn. Verz. Schmett. 125.

Body and wings slightly metallic, the former and the base of the latter with white dots. Antennæ setaceous, of the male deeply pectinated nearly to the tips, of the female serrate along the whole length. Wings long, narrow, wholly opaque and squamose, unspotted except the dots at the base. Hind wings not angular. Abdomen nearly linear, not petiolated. Legs slender. Hind tibiæ with short spurs, not plumose.

70. EUCHROMIA THORACICA.

Albo guttata ; caput nigrum ; thorax rufus ; abdomen cyaneum, subtus e guttis albis univittatum ; alæ cyaneæ, basi albo guttatæ ; pedes nigri, tibiis basi subtus corisque albo guttatis.

Head, thorax, and base of the abdomen with white dots. Head black. Thorax very bright red. Wings dark blue, with white dots at the base. Abdomen dark blue, with a row of white dots beneath. Legs black ; tibiæ at the base beneath and coxæ with white dots. Length of the body $4\frac{1}{2}$ lines ; of the wings 15 lines.

a. Ega, on the Amazon. From Mr. Bates' collection.

71. EUCHROMIA CONCISA.

Mas. Nigra, angusta, linearis ; caput et thorax ochraceo-hirta ; caput piceum ; antennæ pectinatæ, apice serratæ ; abdomen longum ; alæ nigra, perangustæ ; coxæ anticæ fulvæ.

Male. Black, narrow, linear. Head piceous. Palpi rather long, slightly curved ; third joint about one-fourth of the length of the second. Antennæ moderately pectinated, serrated towards the tips. Head and thorax with orange-tawny hairs. Wings black, very narrow ; discal areolet-veinlet forming an acute angle ; discal streak distinct along the whole length. Abdomen long. Fore coxæ tawny ; fore tibiæ with a long tooth beneath ; hind legs long, their tibiæ with long middle and apical spurs. Length of the body $3\frac{1}{2}$ lines ; of the wings 11 lines.

a, b. Parà. From Mr. Bates' collection.

72. EUCHROMIA HALYS.

Violaceo-fusca ; alæ anticæ fusca fascia media flava ; posticæ limpidæ fusco late marginatæ.

Sphinx adscita Halys, Cram. Pap. Exot. iv. 129, pl. 357, f. C.

Aclytia Halys, Hübn. Verz. Schmett. 123, 1337.

Surinam.

73. EUCHROMIA TIBURTUS.

Nigra, corpus subtus album; antennæ pectinatæ; abdomen auratum, vittis duabus nigris; alæ anticæ aurato-venosæ basi auratæ, macula una ante-media duabusque post-mediis limpidis; posticæ macula una discali limpida.

Sphinx adscita Tiburtus, Cram. Pap. Exot. iii. 75, pl. 237, f. C.
Calonotos Tiburtus, Hübn. Verz. Schmett. 12, 1328.

Surinam.

a. ——— ?

74. EUCHROMIA ALMON.

Nigra; alæ anticæ disco, posticæ basi limpida; abdomen aureo-viridi trivittatum.

Sphinx adscita Almon, Cram. Pap. Exot. iii. 52, pl. 224, f. F. v. 50,
pl. 11, f. 1, A—D.

Autöchloris Almon, Hübn. Verz. Schmett. 125, 1352.

Surinam.

Group 18. ACLYTIA.

Color ad partem metallicus. Corpus crassum, breve. Palpi longi; articulus 3us minimus. Antennæ usque ad apices pectinatæ. Alæ anticæ angustæ; posticæ sat latæ, non angulatæ. Pedes græiles; tibie posticæ calcaribus quatuor elongatis.

Aclytia p., Hübn. Verz. Schmett. 123.

Colour partly metallic. Body stout, short. Palpi long; third joint very small. Antennæ pectinated to the tips. Fore wings narrow. Hind wings rather broad, not angular. Legs slender; median and apical spurs of tibie rather long. Remote from the preceding groups, and approaching *Eucereon*, which forms a passage to the *Bombycidae*.

75. EUCHROMIA HEBER.

Nigro-fusca; abdominis segmenta fasciis latis interruptis cyaneis; alæ anticæ gutta media subcostali flava; posticæ limpida, margine lato nigro.

Sphinx adscita Heber, *Cram. Pap. Exot.* iii. 169, pl. 287, f. A.
Aclytia Heber, *Hübner. Verz. Schmett.* 123, 1338.

Surinam.

a. Honduras. From Mr. Dyson's collection.

76. EUCHROMIA VENTRALIS. a

Flavescente-fusca, ochraceo maculata; abdomen fasciis cyaneis, subtus ochraceo vittatum; alæ fuscae, venis pallidioribus; anticæ fascia fere obsoleta pallidiore; posticæ vitta hyalina.

Glaucopis ventralis, Guér. *Icon. Règne Anim. Ins. Texte*, 503.

Mexico.

77. EUCHROMIA FINALIS.

Mas et Fœm. Viridis, micans, antennis palpisque nigris; thoracis discus nigro-viridis; abdomen fasciis duabus nigro-viridibus, apice cupreum; alæ nigræ, anticæ maculis duabus limpidis discalibus, posticæ una magna limpidis; pedes nigri, tibiis tarsisque subtilus ferrugineis.

Male and female. Brilliant green. Antennæ black, adorned with green scales. Palpi black. Disk of the thorax blackish green. Wings blackish; fore wings with two limpid spots in the disk; hind wings with a large limpid spot which extends to the base. Abdomen with two blackish green bands, one at the base, the other beyond the middle; tip brilliant cupreous. Legs black; tibiæ and tarsi ferruginous beneath. *Male.* Sexualia tawny. *Female.* Sexualia testaceous. Length of the body $4\frac{1}{2}$ —5 lines; of the wings 13—14 lines.

a. Congo. Presented by Sir J. Richardson.

b, c. Port Natal. From M. Gueinzus' collection.

78. EUCHROMIA QUADRIGUTTA.

Nigra; caput et thorax viridia; antennæ late pectinatæ; thorax rufo quadriguttatus; alæ nigro-fuscae; anticæ gutta basali viridi; posticæ vitta lata discali limpida.

Black. Head, most part of the thorax, a row of spots on each side of the abdomen and tibiæ towards the base glittering green. Antennæ rather deeply pectinated; the branches hairy. Thorax

with a red dot on each shoulder and with two more approximate at the base of the abdomen. Wings blackish brown; fore wings with a green dot at the base; hind wings with a broad limpid discal stripe which extends from the base to two-thirds of the length. Coxæ clothed with white hairs. Length of the body $4\frac{1}{2}$ lines; of the wings 17 lines.

a. Mexico. From M. Hartweg's collection.

b. ———? Presented by E. Doubleday, Esq.

79. EUCHROMIA FLAVIGUTTA.

Nigro-fusca; palpi subtus albi; thorax flavo quadrinotatus, cinereo bivittatus; abdomen fasciis interruptis cyaneo-viridibus; alæ anticæ macula antica flava venisque cinereis; posticæ vitta hyalina semiopalina albida; coxæ anticæ et femora albo vittata.

Blackish brown. Palpi white beneath. Thorax with four yellow marks in front, and with four grayish stripes. Fore wings with grayish veins, and with a small yellow spot a little beyond the middle and near the fore border; this spot is largest beneath. Hind wings with a hyaline semiopaline whitish stripe extending from the disk along two-thirds of the length. Abdomen with bluish green interrupted bands; disk of the under side white. Anal appendages long, testaceous. Femora and fore coxæ with white stripes. Length of the body 5 lines; of the wings 14 lines.

a, b. Brazil, From Mr. Stevens' collection.

80. EUCHROMIA CONNEXA.

Mas. Atra; caput, scutellum et pectus cyanea; antennæ serratæ; thorax ochraceo-hirtus; abdomen aurantiacum, vitta latæ dorsali nigra; alæ anticæ sat latæ macula rotunda antica limpidæ; posticæ breves limpidæ marginibus nigris; pedes fuscæ.

Male. Deep black, stout. Head mostly bright blue. Palpi stout, nearly straight, rather short; third joint conical, small. Antennæ slender, serrated beneath. Thorax clothed with orange hairs in front and at the base of each fore wing; scutellum bright blue. Pectus mostly blue. Fore wings black, rather broad, with a round limpid spot near the fore border at half the length. Hind wings limpid with broad black borders, hardly half the length of the

fore wings. Abdomen orange, rather short, tapering from the base to the tip, with a broad black dorsal stripe, interrupted at two-thirds of its length, occupying the whole breadth of the base, and tapering from thence towards the tip, near which it has some blue scales. Legs brown; coxæ with luteous tomentum; fore tibiæ slightly curved; hind tibiæ with no middle spurs, their hind spurs moderately long. Length of the body $5\frac{1}{2}$ lines; of the wings 16 lines.

a. West Africa. From Mr. Stevens' collection.

Group 19. ANTICHLORIS.

Corpus sat angustum. Palpi mediocres; articulus 3us parvus. Antennæ sat late pectinatæ, apices versus serratæ. Alæ anticæ opacæ, sat latæ, immaculatæ, apice subacuminatæ, margine postico obtuse angulato; posticæ apice oblique truncatæ et subangulatæ, margine postico subsinuato.

Antichloris p., *Hüb. Verz. Schmett.* 124.

Body rather narrow. Palpi moderately long; second joint small. Antennæ rather deeply pectinated, serrated towards the tips. Fore wings opaque, unspotted, rather broad, slightly pointed at the tips, obtusely angular on the hind border. Hind wings obliquely truncated and slightly angular at the tips; hind border a little sinuated. Is allied to *E. Phlegmon*, and more especially to *E. fumipennis*, but differs from all the preceding groups in the form of its hind wings.

81. EUCHROMIA ERIPHIA.

Nigro-viridis; alæ anticæ subacuminatæ; posticæ angulatæ, antice albæ; abdominis latera albo guttata.

Zygæna Eriphia, *Fabr. Sp. Ins.* ii. 163, 31; *Mant. Ins.* ii. 105, 37; *Ent. Syst.* iii. 1, 398, 39.

Sphinx Zygæna Eriphia, *Gmel. ed. Syst. Nat.* i. 5, 2396, 134.

Antichloris Phemonoë, *Hüb. Verz. Schmett.* 124, 1348; *Samml. Exot. Schmett.* 9, 8, f. 15, 16.

Antichloris Caca, *Hüb. Samml. Exot. Schmett.* 24, 67, f. 133, 134.

Brazil. Surinam.

a. ———? Presented by E. Doubleday, Esq.

b, c. Brazil. From Mr. Bates' collection.

d. Tapayos, Brazil. From Mr. Bates' collection.

e. ———?

Group 20. MACROCNEME.

Metallicolor. Corpus et alæ basi albo guttata. Antennæ in utroque sexu subpectinatæ. Alæ longæ, angustæ, opacæ, immaculatæ; posticæ non angulatæ. Abdomen sublineare, sessile. Pedes graciles, maris tibiis tarsisque posticis plumosis.

Macrocne p., *Hüb. Verz. Schmett.* 124.

Phyllæcia p., *Guérin, Icon. Règne Anim. Ins. Texte*, 504.

Body and wings more or less brilliantly metallic, the former and the base of the latter generally with white dots. Antennæ slightly pectinated to the tips in both sexes. Wings long, narrow, wholly opaque and squamose, unspotted except the dots at the base. Hind wings not angular. Abdomen nearly linear, not petiolated. Legs slender; hind tibiæ and hind tarsi of the male plumose. Hind tibiæ with short spurs.

82. EUCHROMIA MAJA.

Alæ cyaneo-nigræ; abdomen basi albo punctatum; pedes posteriores compressi elongati ciliati.

Zygæna Maja, *Fabr. Mant. Ins.* ii. 106, 56; *Ent. Syst.* iii. 1, 404, 61.

Sphinx Zygæna Maja, *Gmel. ed. Syst. Nat.* i. 5, 2398, 150.

Macrocne *Maja*, *Hüb. Verz. Schmett.* 124, 1341; *Samml. Exot. Schmett.* 15, 33, f. 65, 66.

Glaucopis leucostigma, *Perty, Delect. Anim. Artic. Bras.* 158, pl. 31, f. 11.

Var. a. Male. Head and thorax bluish green. Tips of the antennæ white beneath. Wings black; fore wings bluish green at the base, and with a broad bluish green band. Abdomen golden green. Hind tibiæ for two-thirds of the length from the tips and hind tarsi plumose; tips of the latter with white hairs.

Var. β. Like *Var. a.* Hind wings bluish green in the disk. Abdomen green.

Var. γ. Like *Var. a.* Dots of the thorax encircled with bluish green. Band of the fore wings golden green, very broad, and partly connected with the green at the base.

Var. δ. Like *Var. a.* Fore wings bluish green for nearly half the length; hind wings bluish green for two-thirds of the length.

Var. e. Lake Var. a. Wings blue with black tips. Hind tibiæ plumose for one-third of the length on the outer side, and for two-thirds of the length on the inner side.

Var. ζ. Like *Var. a.* Wings bright cupreous, with black tips.

a. Parà. Presented by J. P. G. Smith, Esq.

b—d. Parà. From Mr. Stevens' collection.

e, f. Venezuela. From Mr. Dyson's collection.

g, h. Honduras. From Mr. Dyson's collection.

i. New Grenada. From Mr. Children's collection.

j. ———? From Mr. Children's collection.

k. Parà. From Mr. Johnson's collection.

l—p. ———?

83. EUCHROMIA VITTATA.

Mas. Nigra, albo guttata; antennæ apice albæ; abdomen cyaneo trivittatum, subtus e maculis albis bivittatum; alæ anticæ cyaneo variæ; tibiæ tarsique postica plumosa.

Male. Black. Head and thorax with white dots which are mostly encircled with blue. Antennæ black, white beneath towards the tips. Wings black; fore wings with blue dots at the base, and with three blue streaks in front of the disk. Abdomen with three blue stripes above, and with two rows of white dots beneath. Legs black; hind tibiæ for two-thirds of the length from the tips, and hind tarsi plumose, the latter white towards the tips. Length of the body 6 lines; of the wings 18 lines.

a, b. Parà. From Mr. Bates' collection.

84. EUCHROMIA PUNCTATA.

Cyanescens-nigra; thorax albo guttatus; abdomen albo lineatum, basi albo guttatum; alæ fusæ; pedes postici tibiis apice tarsisque nigro ciliatis, his apice albis illis albo cinctis.

Phyllæcia punctata, Guér. Icon. Règne Anim. Ins. Texte, 504.

Campeachy Bay.

85. EUCHROMIA AURATA.

Mas. *Nigra, subaurata; caput et thorax albo guttata; abdomen basi albo guttatum, apice ferrugineum; alæ nigro-fusce, anticæ supra posticæ subtus dimidio basali auratæ; pedes viridi-squamosi, coxis albo guttatis.*

Male. Black, with a golden tinge. Head and thorax with white dots. Antennæ black, white above towards the tips. Wings blackish brown; fore wings gilded for nearly half the length from the base; hind wings gilded beneath for more than half the length. Abdomen with white dots at the base; tip ferruginous. Legs black, with green scales; coxæ with white dots. Length of the body 6 lines; of the wings 18 lines.

a. Venezuela. From M. Becker's collection.

86. EUCHROMIA ÆACUS.

Nigra, guttis nonnullis cyaneis; alæ cyaneo-nigræ.

Sphinx adscita Æacus, *Cram. Pap. Exot.* iv. 129, pl. 357, f. B.
Pseudomya errans, *Hübner. Verz. Schmett.* 124, 1347.

a. Parà. From Mr. Bates' collection.

87. EUCHROMIA AURIPES.

Mas. *Nigra; caput et thorax albo cyaneoque guttata; antennæ apice albæ; abdomen cyaneo trivittatum, subtus albo unifasciatum; alæ anticæ guttis tribus basalibus strigisque tribus anticis cyaneis; tibiæ posticæ apices versus plumosæ; tarsi postici flavi, plumosi.*

Male. Black. Head and thorax with white and blue dots. Antennæ black, white above towards the tips. Wings black; fore wings with blue dots at the base, and with three blue streaks in front of the disk. Abdomen with three blue stripes above, and with a white band at one-third of the length beneath. Legs black; femora and tibiæ tinged with blue; hind tibiæ plumose for one-third of the length from the tips; hind tarsi yellow, plumose with luteous hairs, black at the base. Length of the body 6 lines; of the wings 18 lines.

a. Honduras. From Mr. Dyson's collection.

88. EUCHROMIA BASALIS.

Nigra; thorax cyaneo alboque maculatus; abdomen cyaneo trivittatum maculis basalibus albis, subtus e guttis albis bivittatum fasciæque basali alba; alæ nigræ maculis basalibus limpidis, anticæ apud discum cyaneæ; tarsi fulvi, basi nigri.

Black. Front of head white with purple lustre. Palpi with bluish scales. Antennæ black. Thorax with blue and white spots. Wings black, with limpid spots at the base; disk of the fore wings blue; hind wings blue in front beneath. Abdomen above with white dots at the base, and with three blue stripes; under side with a white band at the base, and with two rows of white dots. Legs with blue scales; tarsi tawny, black towards the base. Length of the body 7 lines; of the wings 19 lines.

a. Ega, on the Amazon. From Mr. Bates' collection.

89. EUCHROMIA LADES.

Atra; alæ anticæ puncto basali flavo; abdomen maculis transversis flavis; pedes postici elongati.

Zygæna Ladis, *Fabr. Sp. Ins.* ii. 165, 47; *Mant. Ins.* ii. 107, 58; *Ent. Syst.* iii. 1, 404, 63.

Sphinx adscita Lades, *Cram. Pap. Exot.* i. 131, pl. 83, f. E.

Sphinx Zygæna Ladis, *Gmel. ed. Syst. Nat.* i. 5, 2399, 152.

Macrocneme Lades, *Hübner. Verz. Schmett.* 124, 1342.

Surinam.

90. EUCHROMIA CHRYSITIS.

Nigra, viridi-aurato micans; caput et thorax anticus albo guttata; antennæ nigræ, apice intus albidæ; abdomen auratum, viridi et rufescente micans, basi nigrum albo quadriguttatum; alæ nigræ, anticæ basi fasciæque auratis; pedes postici tibiis tarsisque depressis dilatatis plumosis.

Glaucoptis chrysis, *Guér. Icon. Règne Anim. Ins. Texte*, 502.

Campeachy Bay.

Group 21. HORAMIA.

Vix metallicolor. Corpus gracile. Antennæ subserratæ, apud medium dilatatæ et fusiformes. Alæ angustæ, opacæ, immaculatæ.

Abdomen ante medium subcontractum. Pedes longi, graciles, tibiis tarsisque posticis plumosis.

Horamia, *Hübner. Verz. Schmett.* 124.

Phyllæcia, *Guér. Icon. Règne Anim. Ins. Texte*, 504.

Male. Body and wings not or hardly metallic. 'Antennæ minutely serrated beneath, dilated and fusiform about the middle. Wings opaque, unspotted. Abdomen slightly contracted before the middle. Legs long and slender; hind tibiæ towards the tips and hind tarsi towards the base plumose. Hind tibiæ with short spurs.

91. EUCHROMIA PLUMIPES.

Nigricans; thorax albo maculatus; abdomen albo fasciatum; tibiæ posticæ plumosæ.

Sphinx plumipes, *Drury, Append.* ii.

Aglaope plumipes, *Westw. ed. Drury*, ii. 51, pl. 27, f. 3.

Var. ? *Nigra*, cyaneo subvaria; caput, thorax, alæ basi nec non abdomen basi albo guttata; abdominis segmenta albo fasciata; alæ nigro-fusæ; tibiæ posticæ albo fasciata, apices versus plumosæ; tarsi postici albi, basi nigri et plumosi.

Palpi short; third joint small.

Black, indistinctly tinged with blue. Head, thorax, base of the wings, and abdomen towards the base with white dots. Wings blackish brown. Abdominal segments with white bands. Legs partly covered with white scales; hind tibiæ with a white band before the middle, beyond which they are deeply plumose with black hairs to the tips; hind tarsi white, black and plumose towards the base.

a. Honduras. From Mr. Dyson's collection.

92. EUCHROMIA PRETUS.

Cervina; antennæ nigro fasciata; prothorax et abdomen basi albicantia; alæ posticæ subfusæ; anticæ testaceæ; femora tibiæque apice nigra.

Sphinx adscita Pretus, *Cram. Pap. Exot.* ii. 121, pl. 175, f. E, F.

Horamia Pretus, *Hübner. Verz. Schmett.* 125, 1351; *Samml. Exot.*

Schmett. Addend. pl. f. 1—4.

Palpi long; third joint elongated.

Isle St. Thomas.

a, b. Jamaica. From Mr. Gosse's collection.

c. ———? Presented by E. Doubleday, Esq.

Group 22. ANYCLES.

Mas. Corpus longiusculum. Palpi breviusculi; articulus 3us minimus. Antennæ late pectinatæ, apices versus simplices. Alæ breviusculæ, perangustæ, postice angulatæ. Pedes sat validi; tibie posticæ calcaribus longiusculis.

Fœm.? Antennæ simplices subsetosæ.

Anycles, MSS.

Male. Body rather long. Palpi rather short; third joint very small. Antennæ rather deeply pectinated for nearly two-thirds of the length, setaceous and abruptly simple from thence to the tips. Wings rather short, very narrow. Fore wings distinctly angular on the hind border. Hind wings distinctly angular on the hind borders and at the tips. Abdomen slightly tapering from the base to the tip. Legs moderately stout; spurs of the hind tibie rather long.

Female? Antennæ simple and beset with short bristles along the whole length. Wings short, extremely narrow, less distinctly angular.

98. EUCHROMIA ANTHRACINA.

Mas. *Purpureo-nigra; prothorax subtus rufo biguttatus; abdomen basi albo bimaculatum; alæ anticæ apices versus sordide albæ; posticæ fuscæ margine antico albido.* *Fœm.?* *Alæ anticæ fascia subapicali albida, apice nigricantes.*

Anycles anthracina, MSS.

Male. Purplish black. Prothorax with a red dot on each side beneath. Fore wings towards the tips dingy white, between which and the black there is a slight brown interval; fringe black. Hind wings dark brown, dingy white in front. Abdomen with an oblong oblique shining white spot on each side at the base.

Female? Fore wings with a whitish band at three-fourths of the length, blackish from thence to the tips. Length of the body 5—6 lines; of the wings 12—14 lines.

- a. ———? Presented by E. Doubleday, Esq.
 b. Venezuela. From M. Becker's collection.
 c. Ega, on the Amazon. From Mr. Bates' collection.
 d, e. Brazil.

94. EUCHROMIA PECTINATA.

Alæ virescentes nitidæ, apice obscuriores; abdomen fulvum.

Zygæna Butus, *Fabr. Mant. Ins.* ii. 105, 39; *Ent. Syst.* iii. 1, 398, 41.

Sphinx Zygæna pectinata, *Gmel. ed. Syst. Nat.* i. 5, 2396, 136.

South America.

Var.? *Nigro-fusca; caput posticum et thorax anticus rufo-hirta; proboscis testacea; antennæ sat late pectinatæ; abdomen rufum; alæ anticæ apice pallidiores, posticæ apud discum sublimpidæ; pedes fusci.*

Male. Blackish brown. Head behind and thorax in front with red hairs. Proboscis testaceous. Palpi curved, rather long; third joint nearly one-third of the length of the second. Antennæ rather deeply pectinated. Fore wings slightly paler towards the tips. Hind wings nearly limpid in the disks. Abdomen red. Legs brown; fore tibiæ short, with a long tooth; hind tibiæ with long spurs. Length of the body 5 lines; of the wings 14 lines.

a. Parà. Presented by J. P. G. Smith, Esq.

b. Parà. From Mr. Bates' collection.

95. EUCHROMIA INSTRUCTA.

Mas. Nigra, sublinearis; caput saturate viride; proboscis lutea; palpi basi testacei; antennæ latissime pectinatæ; abdomen rufum, subfusiforme; alæ nigricantes angustæ, anticæ maculis duabus cinereo-hyalinis; pedes fusci, graciles.

Male. Black, nearly linear. Head mostly emerald green. Proboscis luteous. Palpi short, testaceous towards the base; third joint not more than one-fourth of the length of the second. Antennæ closely and very deeply pectinated. Wings blackish, narrow. Fore wings with two grayish hyaline spots, the hinder one larger than the other which is on the discal areolet. Abdomen bright red, subfusiform; appendages testaceous, very much developed. Legs

slender, brown; fore tibiæ not dentate beneath; hind tibiæ with no middle spurs. Length of the body $4\frac{1}{2}$ —5 lines; of the wings 12—14 lines.

a—c. Sierra Leone. Presented by the Rev. D. F. Morgan.
d. ———?

Group 23. HYDRUSA.

Mas. Non metallicolor. Corpus gracile, lineare. Palpi brevissimi. Antennæ subserratæ, non pectinatæ. Abdomen apice fasciculatum. Alæ opacæ, angustæ, immaculatæ; posticæ non angulatæ. Pedes mediocres; tibiæ posticæ calcaribus brevissimis.

Male. Body and wings not metallic. Body slender, linear. Palpi very short. Antennæ minutely serrated beneath, not pectinated. Wings opaque, squamose, unspotted, narrow. Hind wings not angular. Abdomen tufted at the tip. Legs of moderate length; tibiæ with very short spurs.

96. EUCHROMIA BICOLOR.

Nigra; caput et prothorax aurantiaca; antennæ apice albæ; abdominis segmenta aurantiaco fasciata; tibiæ anticæ subtus flavo fasciculatæ.

Black. Head and prothorax orange. Antennæ white on the outer side towards the tips. Wings black. Abdomen with an orange band on the hind border of each segment. Fore tibiæ with a tuft of yellow hairs beneath. Length of the body $4\frac{1}{2}$ —5 lines; of the wings 14 lines.

a—d. Australia. From the Voyage of H. M. S. Rattlesnake.

Group 24. PIONIA.

Corpus angustum, lineare. Palpi longi, porrecti, validi, subarcuati; articulus 2us 10 multo longior; 3us 10 brevior. Antennæ subpectinatæ. Alæ anticæ longæ, opacæ; posticæ subhyalinæ. Pedes validiusculi; tibiæ anticæ subtus dentatæ fasciculatæ; posticæ calcaribus sat longis.

Body narrow, linear. Palpi long, porrect, slightly curved, rather thick; second joint much longer than the first; third shorter than the first. Antennæ minutely pectinated to the tips. Wings long. Fore wings moderately broad, opaque, banded; transverse

veinlets at the tip of the discal areolet forming a very obtuse angle. Hind wings mostly hyaline. Legs rather stout. Fore tibiæ tufted and dentate in the middle beneath. Spurs of the hind tibiæ rather long. Allied to the *Lithosii*.

97. EUCHROMIA LYCOIDES.

Nigra aut nigro-fusca, testaceo aut fulvo bivittata; proboscis fulva; palpi antennæque basi flava; alæ anticae fasciis duabus fulvis aut testaceis strigisque cinereis; posticae cinereo-hyalinae marginibus fuscis; femora et tarsorum articuli basi testacea.

Black, or blackish brown. Proboscis tawny. Palpi yellow towards the base. Antennæ yellow at the base. A tawny or testaceous stripe on each side of the head and thorax, interrupted by black hairs at the base of the hind wings. Fore wings with two tawny or testaceous bands, one very near to or adjoining the base, the other beyond the middle; gray streaks between the veins from the second band to the tips. Hind wings grayish hyaline with dark brown borders; two testaceous spots in front, one at the base, the other near the tips. Abdomen with a testaceous spot on each side at the base, and with a testaceous stripe along each side above, and another beneath, where the disk is frequently testaceous for half the length from the base. Legs and joints of the tarsi more or less testaceous at the base. Length of the body 5—10 lines; of the wings 14—23 lines.

a, b. Venezuela. From Mr. Dyson's collection.

c. Parà. From Mr. Bates' collection.

d, e. ———? From Mr. Children's collection.

f. ———?

Group 25. PHAUDA.

Mas. Color non metallicus. Corpus validum, depressum, pilosum. Palpi brevissimi; articulus 3us parvus. Antennæ serratæ, corpore paullo longiores. Alæ perangustæ, opacæ, pilosæ. Abdominis latera dense fasciculata. Pedes validiusculi; tibiæ posticae calcaribus mediis nullis, apicalibus minimis.

Male. Colour not metallic. Body stout, rather depressed, thickly clothed with hairs. Palpi very short; third joint small. Antennæ serrated, a little shorter than the body. Wings very narrow, hairy. Hind wings not angular nor truncated. Abdomen with thick tufts of hair along each side, and with two long slender tufts at the tip. Legs rather stout; apical spurs of the tibiæ very small. Allied to the *Bombycidæ*.

98. EUCHROMIA FLAMMANS.

Rufa dense hirta, palpis antennisque nigris; abdomen supra nigro-fusco hirtum, bicaudatum, fasciculis apicalibus concoloribus; alæ anticæ rufæ apice nigrae; posticæ semihyalinae nigro-cinereæ anticæ rufæ; pedes nigri basi rufo-hirti.

Thickly clothed with bright red hairs. Palpi and antennæ black. Thorax with a long bristle on each side beneath. Fore wings red, black towards the tips; black part with a much curved outline, more than twice longer on the hind border than on the fore border; fringe black, hoary at the tips of the wings. Hind wings blackish gray, semihyaline, red in front. Abdomen clothed above with blackish brown hairs, furnished at the tip with two long appendages; apical tufts blackish brown. Legs black, clothed with red hairs at the base. Length of the body $4\frac{1}{2}$ lines; of the wings 14 lines.

a. Northern India. From Mr. Stevens' collection.

99. EUCHROMIA TRIADUM.

Aurantiaca; caput maculis duabus glabris nitentibus nigris; abdomen nigro-hirtum, subtus apice albido-hirtum; alæ apice nigrae; tibiæ apice tarsique nigra. Long. 5; alar. 18 lin.

Orange-colour. Head with a bare black shining spot behind each eye. Proboscis black, very short. Antennæ black. Abdomen clothed with black hairs above except at the base, and with whitish hairs beneath at the tip. Wings with black tips. Tibiæ beneath and at the base, and tarsi black.

a. North China. From Mr. Cuming's collection.

Group 26. DIPÆNÆ.

Corpus breve, crassum, metallicum. Palpi breves; articulus 3us parvus. Antennæ dense plumosæ, basi subpilosæ, apice setosæ. Alæ opacæ, metallicæ, immaculatæ. Pedes graciles; tibiæ posticæ breviter calcaratæ.

Male and Female. Body thick, short, metallic. Palpi short; third joint small. Antennæ thickly plumose, extending towards each end, slightly hairy near the base, setose at the tips. Wings opaque, squamose, metallic, unspotted. Hind wings slightly undu-

lating on the hind border, not angular. Legs slender, of moderate length; hind tibiæ with short spurs.

100. EUCHROMIA ACHARON?

Cyanea; *alæ fusca*; *anus rufus*.

Zygæna Acharon, *Fabr. Sp. Ins.* ii. 166, 51; *Mant. Ins.* ii. 107, 64;
Ent. Syst. iii. 1, 406, 79.

Sphinx Zygæna Acharon? *Gmel. ed. Syst. Nat.* i. 5, 2400, 157.

New Holland?

Var? *Purpurea*; *palpi nigri*; *antennæ cyaneæ*; *alæ anticæ purpureo-cupreæ*; *posticæ subcinereæ marginibus subpurpureis*; *abdomen lateribus subtusque cyaneum, apice rufum*; *pedes cyaneo viridique varii*!

Body purple. Antennæ blue. Palpi black. Fore wings purplish cupreous. Hind wings gray, with a purplish tinge along the border. Abdomen blue on each side and beneath, brilliant red at the tip. Legs purple, tinged with blue and green. Length of the body $3\frac{1}{4}$ —4 lines; of the wings 13—14 lines.

a—d. Paræ. From Mr. Bates' collection.

101. EUCHROMIA CONTENTA.

Mas. Cyaneo-purpurea, sublinearis; *palpi albidi apice nigri*; *antennæ nigrae, dense plumosæ, apice nudæ*; *abdomen rufum, lateribus ventrequæ cyaneo-purpureis, apice rufo-hirtum*; *alæ anticæ subpurpureo cupreo-fusca*; *posticæ cinereo-fusca apicibus marginibusque posticis cyaneo-purpureis*.

Male. Bluish purple, nearly linear. Palpi whitish, with black tips, moderately long, nearly straight; third joint very small, not more than one-fourth of the length of the second. Antennæ black, thickly plumose, bare towards the tips. Wings moderately long, rather broad. Fore wings dark cupreous brown, with a slight purplish tinge, paler towards the tips. Hind wings grayish brown, bluish purple at the tips and along the hind borders. Abdomen bright red, rather short, bluish purple on each side and beneath; tip clothed with bright red hairs. Legs rather slender; fore tibiæ

dentate beneath; middle and apical spurs of the hind tibiæ small. Length of the body 4 lines; of the wings 12 lines.

a, b. Parâ. From Mr. Bates' collection.

102. EUCHROMIA FERRUGINOSA.

Nigra; caput antice cyaneum; antennæ cyaneæ, subsetosæ; pectus testaceum; alæ anticæ cupreæ, posticæ fuscæ; pedes purpureo-cyanei.

Black. Head blue in front. Antennæ blue, minutely setose, with short thick hairs above except towards the base and towards the tips. Pectus testaceous. Wings opaque; fore wings cupreous; hind wings brown. Legs purplish blue; median and apical spurs of the hind tibiæ rather long. Length of the body 5 lines; of the wings 12 lines.

a. ———?

103. EUCHROMIA MÆSTA.

Nigra; caput antice testaceum; antennæ subsetosæ, basi testaceæ; alæ anticæ nigre, posticæ cinereo-fuscæ; abdomen apice rufum; pedes obscure testacei.

Black. Head testaceous in front. Palpi moderately long; third joint very short. Antennæ minutely setose, testaceous at the base. Tip of the abdomen pale red. Wings opaque; fore wings black; hind wings grayish brown. Legs dark testaceous; middle and apical spurs of the hind tibiæ rather long. Length of the body 4 lines; of the wings 12 lines.

a. ———?

104. EUCHROMIA CONTRARIA.

Lutea; caput nigrum, macula antica cyanea guttisque quatuor cyaneis, subtus albidum; thorax nigro bivittatus; abdomen atrum, basi luteum, e maculis cyaneis trivittatum, subtus e maculis cyaneis et luteis bivittatum segmentis testaceo fasciatis; alæ marginibus posticis fuscis, macula magna oblonga sub-apicali alba fusco marginata; posticæ testaceæ; pedes subtus albido vittati.

Bright luteous. Head black above, with a blue spot in front, and with four testaceous dots above, two in front and two behind the base of the antennæ; under side and palpi beneath whitish. Thorax

with two black closely approximate stripes. Tips of fore wings dark brown, including a large oblong oblique white spot; hind border pale brown except near the base; fringe testaceous. Hind wings testaceous, bordered on the hind border with brown and most deeply so towards the base. Abdomen deep black, luteous at the base, and with three rows of blue spots, the middle row not extending towards the base; under side with an interrupted testaceous band on each segment, with a row of blue dots along each side, and with luteous spots on each side towards the base. Legs with whitish stripes beneath. Length of the body 7 lines; of the wings 19 lines.

a. Ega, on the Amazon. From Mr. Bates' collection.

105. EUCHROMIA OPPOSITA.

Nigro-fusca; caput luteo varium; thorax testaceo bivittatus; abdomen testaceum, apicem versus nigrum fasciis cyaneis; alæ anticæ fuscae maculis tribus venisque testaceis; posticæ testacæ nigro-fusco marginatæ; tibiæ posticæ basi femoraque posteriora sublus testacea.

Dark brown. Head clothed beneath with luteous hairs, with a luteous mark between the eyes, with another on the vertex, and with one on each side behind. Thorax with a testaceous stripe on each side. Fore wings brown, with testaceous veins; a large oblong sub-fusiform testaceous spot at one-third of the length, and a transverse one of the same shape at two-thirds of the length, and having a nearly detached testaceous dot in front. Hind wings testaceous, with dark brown hind borders. Abdomen testaceous, black with blue bands above near the tip. Posterior femora and base of hind tibiæ testaceous beneath. Length of the body $5\frac{1}{2}$ lines; of the wings 16 lines.

a. Brazil. From Mr. Argent's collection.

106. EUCHROMIA SYPILUS.

Alæ atra; anticæ vitta interrupta, posticæ basi testacæ; abdomen punctatum.

Zygæna Sypilus, Fabr. Sp. Ins. ii. 164, 39; Mant. Ins. ii. 106, 48; Ent. Syst. iii. 1, 401, 50. Cram. Pap. Exot. ii. 4, pl. 99, f. A. Sphinx Zygæna Sypilus, Gmel. ed. Syst. Nat. i. 5, 2397, 143.

a. Parà. From Mr. Bates' collection.

b. Ega, on the Amazon. From Mr. Bates' collection.

107. EUCHROMIA SPHINGIDEA.

Atra; alæ anticæ nigro-fuscæ, vitta sinuata testacea; posticæ testaceæ, margine postico nigro-fusco; thorax vittis duabus lateralibus interruptis testaceis; abdomen fasciis tribus subapicalibus cæruleis. Long. alar. 15 lin.

Glaucopis sphingidea, Perty Delect. Anim. Artic. Bras. 158, pl. 31, f. 12.

a, b. Parà. From Mr. Bates' collection.

108. EUCHROMIA APICALIS.

Fœm. Nigro-fusca; caput cyaneum; antennæ nigrae; thorax testaceo biguttatus; abdomen fasciis quinque subapicalibus fere connexis duabusque anterioribus cyaneis, subtus e maculis cyaneis bivittatum; alæ anticæ fascia subobliqua testacea.

Female. Blackish brown. Head blue. Antennæ black, a little more than half the length of the body. Thorax with two testaceous dots on each side in front, with some blue scales beneath. Fore wings blackish brown, adorned beyond the middle with a testaceous band which is very slightly oblique, and tapers from the fore border across three-fourths of the breadth. Abdomen with five almost connected sky-blue bands towards the tip, and nearer the base with two more which are much interrupted on the disk; under side with a row of sky-blue spots along each side. Length of the body 6 lines; of the wings 16 lines.

a—c. Parà. From Mr. Bates' collection.

109. EUCHROMIA CAPYS.

Nigra; alæ anticæ apice albæ.

Zygæna Capys, Fabr. Sp. Ins. ii. 166, 48; Mant. Ins. ii. 107, 60; Ent. Syst. iii. 1, 406, 66.

Sphinx Capys, Cram. Pap. Exot. i. 88, pl. 56, f. E.

Sphinx Zygæna Capys, Gmel. ed. Syst. Nat. i. 5, 2399, 154.

Surinam.

Var.? *Nigro-fusca*; *caput flavum, vertice fronteque fuscis*; *antennæ nigrae*; *thorax testaceo quadrivittatus*; *alæ anticae apice albæ*; *posticae nigrae fascia lata cinereo-hyalina*; *abdomen supra nigro-cyaneum*; *coxæ et femora subtus albida*.

Dark brown. Head yellow, dark brown above and in front. Proboscis pale testaceous. Antennæ black. Thorax with four pale testaceous stripes. Fore wings with snow white tips; veins testaceous. Hind wings black, with a broad grayish hyaline stripe which is narrower on approaching the hind border near the tip. Abdomen blackish blue above. Coxæ and femora dingy white beneath. Length of the body 6 lines; of the wings 16 lines.

a. Tapayos, Brazil. From Mr. Bates' collection.

110. EUCHROMIA THOAS.

Alæ anticae fuscae; *posticae atrae disco subhyalino*; *prothorax sanguineus*.

Zygæna Thoas, *Fabr. Sp. Ins.* ii. 166, 53; *Mant. Ins.* ii. 107, 66; *Ent. Syst.* iii. 1, 407, 72.

Sphinx Zygæna Thoas, *Gmel. ed. Syst. Nat.* i. 5, 2400, 159.

Var.? *Caput et thorax anticus rufo bimaculata*; *alæ anticae apice albæ*; *abdomen cyaneum*; *coxæ anticae ad partem rufescentes*.

Var.? Head and fore part of thorax with two red spots on each side. A little white on the tips of the fore wings. Abdomen blue. Fore coxæ partly reddish. Length of the body 6 lines; of the wings 16 lines.

a. Demerara. Presented by J. S. Bowerbank, Esq.

111. EUCHROMIA THETIS.

Cerulea; *humeri rubro punctati*; *alæ nigrae, anticae apice, posticae disco hyalinæ*.

Sphinx Thetis, *Linn. Mant.* i. 539.

Zygæna Thetis, *Fabr. Sp. Ins.* ii. 160, 13; *Mant. Ins.* ii. 103, 15;

Ent. Syst. iii. 1, 391, 17. *Drury, Ins.* 1, pl. 26, f. 4.

Sphinx Zygæna Thetis, *Gmel. ed. Syst. Nat.* i. 5, 2393, 115.

Sphinx adscita Leneus, *Cram. Pap. Exot.* iii. 95, pl. 248, f. G.

Calonotos Thetis, *Hübner. Verz. Schmett.* 123, 1331.

Zygæna? Thetis, *Westw. ed. Drury*, i. 52, pl. 26, f. 4.

Surinam. Jamaica.

Var.? *Mas. Fusca; thorax rufo bimaculatus; abdomen cyaneo-viride, subtus album apicem versus fuscum; alæ anticæ apice albæ; posticæ nigre fascia cinereo-hyalina basi albo ciliatæ; coxæ et femora subtus alba.*

E. Capys, male? Dark brown. Head wanting. Thorax with a red spot on each side in front. Fore wings with snow white tips; veins blackish. Hind wings black with a broad grayish hyaline stripe which does not extend so far as in *E. Capys?* and with a fringe of white hairs along the inner border. Abdomen bright bluish green; under side white, brown towards the tip; coxæ and femora white beneath. Length of the body 6 lines; of the wings 16 lines.

a. Venezuela. From Mr. Dyson's collection.

112. EUCHROMIA ARONTES.

Alæ fusæ; anticæ apice pallidiores, fascia obliqua flava nigro punctata albo marginata, maculaque purpurea; posticæ basi pallidiores.

Sphinx adscita Arontes, *Cram. Pap. Exot.* iv. 184, pl. 382, f. E.

Surinam.

Group 27. SCENA.

Corpus pilosum. Oculi magni. Proboscis longa. Alæ opacæ; anticæ longæ, angustæ. Abdomen thorace fere duplo longius. Pedes validiusculi; tibiæ posticæ calcaribus quatuor sat longis.

Eyes large, prominent. Proboscis long. Thorax very hairy. Wings quite opaque. Fore wings long and narrow. Abdomen nearly twice the length of the thorax. Legs rather stout; hind tibiæ with four moderately long spurs.

113. EUCHROMIA STYX?

Cyanea; *thorax rufus*.

Zygæna Styx? *Fabr. Sp. Ins.* ii. 166, 52; *Mant. Ins.* ii. 107, 65;
Ent. Syst. iii. 1, 407, 71.

Sphinx Zygæna Styx? *Gmel. ed. Syst. Nat.* i. 5, 2400, 158.

Africa.

a. ———? Presented by E. Doubleday, Esq.

Var.? *Atra*; *caput et thorax aurantiaco-hirta*; *thorax maculis duabus scutelloque purpureis*; *pectus nigro-hirtum*; *abdomen e maculis cyaneis guttisque albis bivittatum, subtus cyaneo bivittatum*; *alæ anticæ longæ angustæ, macula basali strigaeque arcuata antica cyaneis*; *tarsi postici albi*.

Deep black. Head and thorax thickly clothed with bright orange hairs. Thorax with two purple spots in front; scutellum purple. Pectus clothed with black hairs. Fore wings narrow, very long, with a blue spot at the base, and a curved blue mark beyond the middle towards the fore border. Abdomen tapering towards the tip, with a row of blue spots and of white dots along each side; under side with two blue stripes. Hind tarsi white with black tips. Length of the body 8 lines; of the wings 24 lines.

a. ———? Presented by E. Doubleday, Esq.

Group 28. MELISA.

Corpus sublineare. Caput parvum. Proboscis brevis. Palpi breves, crassi; articulus 3us minimus. Antennæ grâciles, filiformes, simplices, nudæ. Thorax pilosus. Abdomen thorace plus duplo longius. Alæ opacæ, immaculatæ; anticæ longæ, angustæ; posticæ brevissimæ. Pedes validiusculi; femora pilosa; tibiæ posticæ calcaribus mediis nullis, apicalibus minimis.

Body nearly linear. Head small. Eyes not prominent. Proboscis short. Palpi short and thick; third joint very small. Antennæ slender, filiform, simple, bare. Thorax hairy. Abdomen more than twice the length of the thorax. Fore wings long and narrow, opaque; discal areolet small, at before half the length; emitting only three veins, two from the tip, slightly inclined to the hind border; third emerging from the hind border and proceeding directly to the border of the wing. Hind wings very small, not more than one-fourth of the length of the fore wings. Legs rather stout; femora thickly pilose; hind tibiæ with no middle spurs; apical pair very small.

114. EUCHROMIA DIPTERA.

Mas. Atra; antennæ filiformes, graciles, nudæ, simplices; abdomen longum, attenuatum, e maculis flavis bivittatum, subtus aurantiacum apice testaceum; alæ cyaneæ, anticæ longæ angustæ, posticæ breves; pedes testacei, coxis nigris.

Male. Deep black. Antennæ filiform, slender, bare, quite simple, longer than the thorax. Palpi very short. Wings metallic blue. Fore wings long, narrow. Hind wings not more than one-third of the length of the fore wings. Abdomen long, tapering from the base to the tip, with a row of yellow spots along each side; under side orange, testaceous towards the tip. Legs testaceous; coxæ black; femora clothed with orange hairs. Length of the body 10 lines; of the wings 25 lines.

a. Congo. Presented by Sir J. Richardson.

Group 29. EUCEREEON.

Corpus validiusculum, fere cylindricum. Palpi mediocres, arcuati; articulus 3us minimus. Antennæ graciles, subpectinatae. Alæ opacæ, maculatæ. Pedes sat validi; tibiæ posticæ calcaribus quatuor longiusculis.

Eucereon, Hübn. Verz. Schmett. 123.

Sericaria, Anon. Ins. Surinam, 149.

Body rather stout, nearly cylindrical. Palpi moderately long, curved; third joint very minute. Antennæ slender, minutely pectinated to the tips. Wings opaque, spotted. Legs moderately stout;

median and apical spurs of the hind tibiæ rather long. This group connects the *Zygania* with the *Bombycidae*.

115. EUCHROMIA PIERUS.

Cinerea; alæ anticæ canæ, maculis basalibus fasciisque incompletis et macularibus quatuor nigris; posticæ nigrae, antice basim versus albidae.

Sphinx adscita Pierus, *Cram. Pap. Exot.* iv. 148, pl. 367, f. E.
Eucereon Pierus, *Hübner. Verz. Schmett.* 123, 1336.

Surinam.

116. EUCHROMIA SUBPLENA.

Mas. Nigro-fusca; caput rufo fasciatum; scutellum ferrugineum; pectus strigis duabus obliquis albis; abdomen supra apice coccineum, subtus triente apicali excepta albidum; alæ anticæ maculis duabus magnis transversis limpidis; posticæ fere nigrae, macula una basali limpida, basi lobata, margine postico basali albo; femora postica apice albida.

Male. Blackish brown. Head with an interrupted red band behind. Proboscis testaceous. Scutellum ferruginous. Pectus with an oblique white streak on each side. Fore wings with two large irregular transverse limpid spots, one at the base, and one beyond the middle; veins pale brown. Hind wings almost black, with a large divided limpid spot at the base in front; hind part widened into a brown lobe, not so large as that of *E. tetragramma*, white along part of the hind border from the base. Abdomen crimson at the tip above; under side whitish for two-thirds of the length from the base. Hind femora whitish at the tips. Length of the body 4 lines; of the wings 13 lines.

a. Rio Janeiro. From Mr. Stevens' collection.

117. EUCHROMIA VARIA.

Fœm. Nigro-fusca; caput luteo subfasciatum; scutellum flavum; abdomen apicem versus fascia latissima aurantiaca, subtus fuscum; alæ anticæ macula parva albida semihyalina fasciisque irregulari obliqua fusca, subtus albido maculatae; posticæ limpida nigro marginatae; pedes fusci, coxis luteis, femoribus posticis apice testaceis.

Fem. Blackish brown. Head with a half-interrupted luteous band on the hind border. Proboscis testaceous. Scutellum yellow. Fore wings with a small whitish semihyaline spot near the middle of the fore border, and with a very irregular oblique pale brown band near the tip and most apparent by the hind border; veins brown; under side with several whitish spots. Hind wings limpid, with very broad black borders. Abdomen with a very broad orange band near the tip, connected on each side in front with an orange spot; under side brown. Legs brown; coxæ luteous; hind femora pale testaceous at the tips. Length of the body 8 lines; of the wings 20 lines.

a. Parà. Presented by J. P. G. Smith, Esq.

118. EUCHROMIA ARCHIAS.

Sphinx adscita Archias, *Stoll*; *Cram. Pap. Exot.* v. 66, pl. 14, f. 9, 10.

Eucereon Archias, *Hübner. Verz. Schmett.* 123, 1333.

Surinam.

Var.? *Mas. Nigro-fusca; caput rufo bimaculatum; abdomen apicem versus fascia lata rufa, subtus pallide rufum, apice fuscum; alæ anticæ fuscae, fasciis duabus albicantibus, venis testaceis; posticæ nigro-fuscae basi albido-semihyalinae; femora subtus testacea.*

Marica Male? Dark brown. Head with two red spots on the vertex; under side clothed with whitish hairs. Proboscis tawny. Thorax with some luteous hairs on each side in front and behind the scutellum. Pectus with pale testaceous hairs. Fore wings brown, with two irregular whitish bands which slightly intersect some of the brown part; veins testaceous. Hind wings dark brown, whitish and semihyaline towards the base. Abdomen with a broad bright red band beyond the middle; under side pale red, brown at the tip. Femora pale testaceous beneath. Length of the body 6 lines; of the wings 18 lines.

a. Parà. From Mr. Bates' collection.

119. EUCHROMIA TETRAGRAMMA.

Mas. Fusca; caput rufo varium; antennæ apice albæ; abdomen rufum, apice nigrum; alæ anticæ strigis pallidioribus maculisque tribus sublimpidis, venis rufis; posticæ sublimpidæ fusco marginatæ, basi lobatæ et ciliatæ; pedes rufo varii.

Small. Brown. Head partly red above and in front. Proboscis testaceous. Palpi curved; moderately long; third joint very minute, not one-fourth of the length of the second. Antennæ white above towards the tips. Fore wings with some paler marks, and with three nearly limpid spots; one large, widening from the base, and containing a brown spot; the other two towards the tip, smaller, nearly square, and almost contiguous; veins red. Hind wings nearly limpid, with brown hind borders and tips, dilated behind near the base and forming a lobe which is fringed with very long hairs. Abdomen bright red; tip black. Coxæ, femora except the tips, tips of the tibiæ and of some of the joints reddish. Length of the body $3\frac{1}{2}$ lines; of the wings 12 lines.

Var. β. Fore wings dark brown, with the limpid spots much larger and more contiguous; veins testaceous.

Var. γ. Abdomen pale testaceous towards the base.

Fœm.? *Albido-fusca; caput flavo fasciatum; antennæ subpectinata; thorax maculis duabus anticis vittisque quinque fuscis, scutello apicem versus flavo, pectoris lateribus albidis; abdomen rufum, apice nigrum; alæ anticæ albidæ e maculis fuscis trifasciatæ; posticæ sublimpidæ marginibus nigricantibus; pedes fusci, coxis femoribusque testaceis.*

Fem.? Whitish brown. Antennæ slightly pectinated. Head with a yellow band above behind the vertex. Thorax with two brown spots in front and with five brown stripes; scutellum yellow towards the tip. Pectus whitish on each side. Fore wings whitish, with three bands composed of brown spots, one at the base, another at the tip, the third a little beyond the middle, more regular and less diffused than the other two. Hind wings nearly limpid with blackish borders. Abdomen bright red with a black tip. Legs dark brown, mostly covered with whitish tomentum; coxæ and femora testaceous. Length of the body 5 lines; of the wings 16 lines.

a. Santarem, Brazil. From Mr. Bates' collection.

b. Pará. Presented by Gordon Graham, Esq.

c, d. Honduras. From Mr. Dyson's collection.

120. EUCHROMIA MARICA.

Sphinx adscita Marica, *Cram. Pap. Exot.* i. 31, pl. 20, f. F, G.
Eucereon Marica, *Hübner. Verz. Schmett.* 123, 1335.

Surinam.

Var. ? *Nigra* ; caput supra testaceum macula nigra ; thorax lateribus vittisque duabus testaceis ; abdomen luteum, dimidio basali fusco, apicem versus e maculis nigris trivittatum ; alæ anticæ fuscae, nigro guttatae albidoque bifasciatae ; posticæ cinereae, basi albidæ semihyalinae ; femora subtus testacea.

Black. Head testaceous above, with a black spot between the eyes. Proboscis tawny. Thorax testaceous on each side, and with two testaceous stripes on the disk. Fore wings pale brown, with many black spots, and with two broad irregular whitish bands ; these are most distinct beneath which is darker brown and unspotted. Hind wings dark gray, whitish and semihyaline towards the base. Abdomen luteous ; disk brown above for half the length from the base ; a black dot on each of the fifth and sixth segments ; a large subquadrate black spot on the seventh, and a row of black spots along each side ; under side luteous with a brown tip. Femora testaceous beneath. Length of the body $5\frac{1}{2}$ lines ; of the wings 17 lines.

a. Parà. From Mr. Bates' collection.

121. EUCHROMIA SYLVIVS.

Alæ anticæ fuscae aut cervinae strigis plurimis nigricantibus ; abdomen ex parte rufum aut luteum aut flavum.

Sphinx adscita Sylvius, *Stoll ; Cram. Pap. Exot.* v. 65, pl. 14.
Eucereon Sylvius, *Hübner. Verz. Schmett.* 123, 1334.
Sericaria Sylvius, *Anon. Ins. Surinam*, 149, pl. 71.

Var. a. Fore wings brown ; areolets full of blackish marks of various size and shape, but mostly cuneiform. Abdomen partly red.

Var. β. Fore wings fawn colour, their spots large and less numerous. Abdomen partly red.

Var. γ. Like Var. β, but abdomen partly luteous.

Var. e. Like *Var. d.* Wings still darker. Abdomen partly yellow.

a. Honduras. From Mr. Dyson's collection.

b, c. Venezuela. From Mr. Dyson's collection.

d. ———? From Mr. Children's collection.

e. Mexico. From Mr. Argent's collection.

f. Santarem, Brazil. From Mr. Bates' collection.

122. EUCHROMIA PILATII.

Fœm. *Fusca*; *caput nigro notatum rufoque fasciatum*; *antennæ subpectinatae*; *thorax fusco univittatus aut trivittatus*; *abdomen rufum basi nigrum, subtus testaceum apice nigrum*; *alæ anticæ albidæ nigro multistrigatæ*; *posticæ cinereo-hyalinæ, nigro marginatæ*; *pedes testacei nigro substrigati.*

Melphe Pilatii, MSS.

Fem. Pale brown. Head with a black cuneiform mark between the eyes, and with a slight red band behind. Palpi and antennæ dark brown, the former very minutely pectinated. Thorax with one or three slight dark brown dorsal stripes. Fore wings whitish, with brown veins and with numerous black streaks. Hind wings grayish hyaline, with blackish tips and hind borders. Abdomen red, black above towards the base; under side testaceous or very pale red, with a black tip. Legs testaceous, slightly streaked with brown. Length of the body 5—5½ lines; of the wings 17—18 lines.

a. Honduras. From Mr. Dyson's collection.

b, c. Brazil. From M. Becker's collection.

123. EUCHROMIA ROSINA.

Fœm. *Cervina*; *caput nigro guttatum*; *palpi fuscis*; *antennæ nigro-fuscae, subpectinatae, basi apiceque albidæ*; *thorax guttis nonnullis vittisque duabus fuscis*; *abdomen rufum macula basali nigra, subtus testaceum e maculis nigris bivittatum*; *alæ albidæ, anticæ e maculis fuscis quadrisubfasciatæ, posticæ fusco marginatæ*; *pedes testacei, tibiis tarsisque nigro fasciatis.*

Fem. Pale fawn colour. Head with a black dot between the antennæ. Palpi brown. Antennæ dark brown, very minutely pectinated, whitish at the base, and above towards the tips. Thorax with some brown dots, and on each side with a brown stripe. Pectus

with testaceous tomentum. Fore-wings whitish, with brown spots which form four very irregular bands; veins testaceous. Hind wings whitish with brown tips and hind borders. Abdomen bright red, with a black spot at the base; under side testaceous with a row of black spots on each side. Legs pale testaceous; tibiæ and tarsi with black bands. Length of the body 4 lines; of the wings 12 lines.

a. Venezuela. From Mr. Dyson's collection.

124. EUCHROMIA ROSA.

Fœm. *Fusca; caput luteo fasciatum; thorax testaceus; abdomen rufum subtus testaceum nigro bivittatum; alæ anticæ striga antica subapicali irregulari obliqua divisa limpida; pedes fusci, coxis luteis, tibiis tarsisque albido fasciatis.*

Fem. Dark brown. Head with a divided luteous band behind. Proboscis and thorax (divested of the hairs) testaceous. Fore wings with a small irregular oblique divided limp streak near the tip in front; veins pale brown. Hind wings wholly dark brown. Abdomen red; under side testaceous, with a blackish stripe along each side. Legs brown; coxæ pale luteous; tibiæ and joints of the tarsi with whitish bands. Length of the body $4\frac{1}{2}$ lines; of the wings 12 lines.

a. Honduras. From Mr. Dyson's collection.

125. EUCHROMIA GRYLLOIDES.

Fœm. *Nigro-fusca; caput rufo fasciatum; antennæ nigræ, subpectinatae; thorax fascia antica strigisque duabus maculaque scutellari luteis; pectus testaceum; alæ anticæ fusæ fasciis duabus una lata altera angusta interrupta cyaneis; posticæ cyaneæ nigro marginatæ.*

Fem. Blackish brown. Head with a short red band behind, clothed with testaceous hairs beneath. Proboscis testaceous. Antennæ black, minutely pectinated. Palpi much curved; second joint very long; third joint very small, not more than one-eighth of the length of the second. Thorax with a luteous band in front and a luteous stripe on each side, and a luteous spot on the scutellum. Pectus mostly testaceous. Fore wings brown, with two-irregular short pale blue bands; one at the base, broad; the other narrow, near the tip and composed of two subquadrate spots; veins testaceous, with a few small adjoining spots of the same colour. Hind wings

brighter blue with black hind borders, their tips black for more than one-third of the length. Legs brown; coxæ red or luteous. Length of the body 6—7 lines; of the wings 18—19 lines.

a—c. Parà. Presented by Gordon Graham, Esq.

126. EUCHROMIA BOMBYCINA.

Coccinea; thoracis latera albo lineata; alæ nigro-fuscae, subviolaceo-micantes, margine postico tenuissimo albo; anticæ lineola basali antica alba; abdomen nigrum, apice coccineum. Long. alar. 25 lin.

Glaucoptis Bombycina, Perty, *Delect. Anim. Artic. Bras.* 158, pl. 31, f. 13.

Brazil.

Group 30. FREGELLA.

Fem. Corpus crassum, ex parte metallicum. Palpi sat longi; articulus 3us minimus. Antennæ usque ad apices pectinatæ. Abdomen subfusiforme. Alæ opacæ; anticæ maculis semihyalinis. Pedes mediocriter longi et validi; tibiæ posticæ breviter calcaratæ.

Female. Body thick, partly metallic. Palpi rather long; third joint very small. Antennæ pectinated to the tips. Wings opaque, squamose; fore wings with semihyaline spots; hind wings not angular. Abdomen subfusiform, not petiolated, as broad as the thorax. Legs moderately long and stout; hind tibiæ with short spurs.

127. EUCHROMIA SEMILUNA.

Nigra, ad partem rufo-hirta; palpi rufi; thorax purpureo bimaculatus; abdomen basi apiceque rufum, segmentorum marginibus posticis cyaneis aut purpureis; alæ nigro-fuscae; anticæ fasciis quatuor luteis unaque flava; posticæ striga basali maculisque duabus luteis; tibiæ posticæ rufo strigatæ.

Black. Head, thorax in front, behind, beneath, and with two slender oblique stripes on the disk, and coxæ clothed with bright red hairs. Proboscis testaceous. Palpi red. Thorax with two purple spots in front. Wings blackish brown. Fore wings slightly angular behind; at the base a slender yellow band, adjoining which there is a broad semicircular luteous band, the latter is red at its junction

with the base; disk with two luteous bands which do not extend to the hind border, first upright, second slightly oblique. Hind wings with a luteous streak in front at the base, and with two luteous spots which form a short band in the disk. Abdomen bright red at the base and at the tip; hind borders of the segments tinged with blue or purple. Hind tibiæ with a short red streak on the outer side by the base. Length of the body 7 lines; of the wings 22 lines.

a. — ? From Mr. Children's collection.

Group 31. RHIPHA.

Fœm. Corpus valde robustum. Palpi crassiusculi, arcuati; articulus 3us minimus. Antennæ gracillimæ, subsetosæ. Alæ opacæ. Pedes sat validæ; tibiæ posticæ calcaribus quatuor longiusculis.

Fem. Body very stout. Palpi rather thick, curved; third joint very small. Antennæ very slender, with short bristles beneath, not pectinated or serrated. Wings opaque. Legs moderately stout; median and apical spurs of the hind tibiæ rather long.

128. EUCHROMIA STRIGOSA.

Atra; caput albo sexguttatum; thorax albo guttatus et bivittatus; abdomen maculis octo ventreeque luteis; alæ anticæ nigro-cyanæ, albo strigatæ; posticæ nigro-fuscæ disco albidæ.

Deep black. Head with six white dots above. First joint of the palpi clothed beneath with white hairs. Thorax with white dots on each side in front, and with two broad short white stripes between the wings; some white hairs on the scutellum. Fore wings bluish black, with some slight white streaks towards the base and parallel to the fore border; behind these or nearer the tips are five broader oblique white stripes of various size; of these only the apical one which is broadest appears beneath. Hind wings blackish brown, partly and slightly whitish in the disk, more distinctly so beneath. Abdomen with a row of four transverse luteous spots on each side; disk beneath luteous. Fore coxæ testaceous beneath. Trochanters and tips of femora beneath with white dots. Length of the body 8 lines; of the wings 21 lines.

a. Rio Janeiro. From Mr. Stevens' collection.

Group 32. ACHARIA.

Corpus crassum, pilosum. Alæ opacæ; posticæ dilatatæ.
Acharia, Hübn. Verz. Schmett. 121.

Body thick, hairy. Wings opaque; hind wings dilated. Nearly allied to the *Bombycidae*.

129. EUCHROMIA BRUNNUS.

Rufo-fusca; alæ posticæ dilatatæ, margine postico undulato.

Sesia brunneus, Fabr. Ent. Syst. iii. 1, 381, 7.

Sphinx adscita Brunnus, Cram. Pap. Exot. ii. 147, pl. 147, f. C.

Acharia Brunnus, Hübn. Verz. Schmett. 124, 1339.

Surinam.

Group 33. ORCYNIA.

Corpus cylindricum, sublineare. Oculi extantes. Palpi verticem fere attingentes; articulus 3us minimus, 2o plus quadruplo brevior. Antennæ mediocriter pectinatæ. Alæ perangustæ, opacæ, immaculatæ. Abdomen fusiforme, thorace fere duplo longius. Pedes longi, validi; tibiæ posticæ calcaribus quatuor elongatis.

Approaching in structure the seventh group of *Glaucopis*.

Body cylindrical, nearly linear. Eyes prominent. Palpi nearly reaching the vertex; third joint very small, not one-fourth of the length of the second. Antennæ moderately pectinated, full half the length of the body. Wings very narrow, opaque, unspotted. Abdomen fusiform, nearly twice the length of the thorax. Legs rather long and stout; hind tibiæ with four rather long spurs.

130. EUCHROMIA CALCARATA.

Nigro-purpurea; caput flavum, nigro bifasciatum; palpi subtus flavi; antennæ luteæ, subpectinatæ; thorax flavo sexmaculatus; abdomen fusiforme, dimidio antico flavo sexmaculato; alæ longæ, angustæ, purpureo-fusæ? basi et antice luteæ; tarsi anteriores subtus ferruginei, postici apice lutei.

Purplish black. Head bright yellow, with a black band between the antennæ, and with another between the palpi. Palpi straight, rather long, yellow beneath; third joint very minute. Antennæ bright luteous, minutely pectinated. Thorax with six bright yellow spots, two on the prothorax, three elongate on the mesothorax, and one on the scutellum. Pectus with yellow spots. Wings long and narrow, purplish brown? luteous towards the base and in front. Abdomen fusiform, with three large yellow spots on each side of the fore half above and the same beneath. Legs rather stout; spurs of the tibiæ rather long; anterior tarsi ferruginous beneath; hind tarsi luteous towards the tips. Length of the body 11 lines; of the wings 28 lines.

α. Santarem, Brazil. From Mr. Bates' collection.

Group ———?

131. EUCHROMIA EUNOLPHUS.

Fusca; prothorax flavescens; abdomen basi cingulo niveo.

Zygæna Eunolphus, *Fabr. Sp. Ins.* ii. 505; *Mant. Ins.* ii. 107, 59; *Ent. Syst.* iii. 1, 405, 64.

Sphinx Zygæna Eunolphus, *Gmel. ed. Syst. Nat.* i. 5, 2399, 153.

———?

132. EUCHROMIA BIMACULATA.

Alæ concolores nigrae; anticae flavo bimaculatæ; posticae albo bimaculatæ.

Zygæna bimaculata, *Fabr. Mant. Ins.* ii. 106, 51; *Ent. Syst.* iii. 1, 402, 64.

Sphinx Zygæna bimaculata, *Gmel. ed. Syst. Nat.* i. 5, 2398, 145.

America.

133. EUCHROMIA AGRIUS.

Nigra; alæ hyalino punctatæ, anticae atræ, posticae cyaneæ.

Zygæna Agrius, *Fabr. Sp. Ins.* ii. 159, 6; *Mant. Ins.* ii. 102, 8; *Ent. Syst.* iii. 1, 389, 10.

Sphinx Zygæna Agrius, *Gmel. ed. Syst. Nat.* i. 5, 2392, 110.

Surinam.

134. EUCHROMIA GYON.

Alæ fuscae ; anticae maculis duabus, posticae vitta abbreviata flavescens.

Zygæna Gyon, *Fabr. Mant. Ins.* ii. 105, 43 ; *Ent. Syst.* iii. 1, 399, 45.

Sphinx *Zygæna* Gyon, *Gmel. ed. Syst. Nat.* i. 5, 2397, 138.
Cayenne.

135. EUCHROMIA ACHEMON.

Flava ; alæ hyalinæ apice nigræ, anticae basi flavæ.

Zygæna Achemon, *Fabr. Sp. Ins.* ii. 162, 24 ; *Mant. Ins.* ii. 104, 29 ; *Ent. Syst.* iii. 395, 31.

Sphinx *Zygæna* Achemon, *Gmel. ed. Syst. Nat.* i. 5, 2396, 131.
Jamaica.

136. EUCHROMIA GUINEENSIS.

Alæ fuscae, maculis duabus albis ; abdomen cyaneum, cingulo fulvo.

Zygæna Guineensis, *Fabr. Sp. Ins.* ii. 159, 10 ; *Mant. Ins.* ii. 102, 12 ; *Ent. Syst.* iii. 1, 390, 14.

Sphinx *Zygæna* Guineensis, *Gmel. ed. Syst. Nat.* i. 5, 2393, 113.
Guinea.

137. EUCHROMIA CYANEA.

Cyanea ; alæ fuscae, basi margineque antico cyaneis ; antennæ pectinatae.

Sphinx cyanea, *Mus. Lesk.* 96, 204.

Sphinx *Zygæna* cyanea, *Gmel. ed. Syst. Nat.* i. 5, 2400, 165.

——— ?

138. EUCHROMIA ? ERGOTIS.

Thorax fulvus ; alæ atræ, anticæ fascia apicis alba.

Zygæna Ergotis, *Fabr. Sp. Ins.* ii. 164, 36; *Mant. Ins.* ii. 105, 44;
Ent. Syst. iii. 1, 400, 46.

Sphinx Zygæna Ergotis, *Gmel. ed. Syst. Nat.* i. 5, 2397, 139.

This species may be one of the *Lithosiidæ*.

Madeira.

139. EUCHROMIA ? METIS.

*Mas. et Fœm. Alæ fusæ (coloribus forte mutatis) ; anticæ fascia
baseos obliqua, alteraque subapicali albis ; posticæ brevissima,
albo maculatæ.*

Charidea metis, *Dalm. Kongl. Vet. Acad. Handl.* 1825, 407, 9, pl. 5,
f. 19.

In gum copal.

140. EUCHROMIA DARES.

*Nigro-fusca ; alæ anticæ albidæ, macula magna discali minoribus-
que marginalibus fuscis.*

Sphinx adscita Dares, *Cram. Pap. Exot.* i. 76, pl. 48, f. F.

West Indies.

141. EUCHROMIA STRIGIVENTRIS.

*Corpus fuscum, antice binis maculis luteis ; abdomen luteum,
supra excisuris nigris strigatum ; alæ integræ, utrinque fusæ,
maculis fenestratis albis, basi luteo maculatæ,*

Glaucopis strigiventris, *Guér. Voy. Duperrey, Zool.* ii. 283, *Atlas*,
Ins. pl. 19, f. 8.

Brazil.

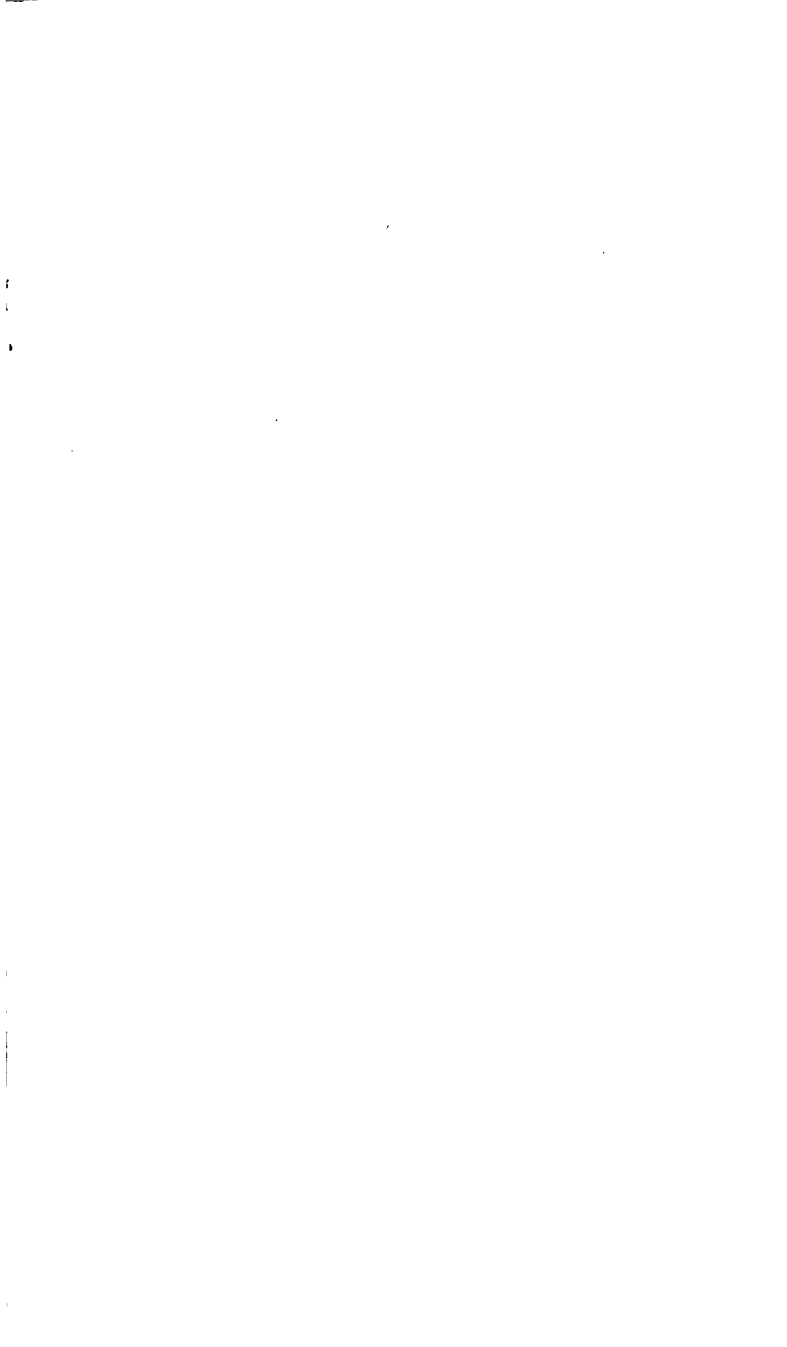
142. EUCHROMIA BAUCIS.

Coccinea, nigro maculata; antennæ pectinatæ; alæ nigrae, costa ciliisque, abdominis linea laterali et tegularum margine albis.

Long. corp. 9 lin.; lat. 24 lin.

Charidea? Baucis, *Dalm. Anal. Entom.* 50, 25.

Brazil.



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